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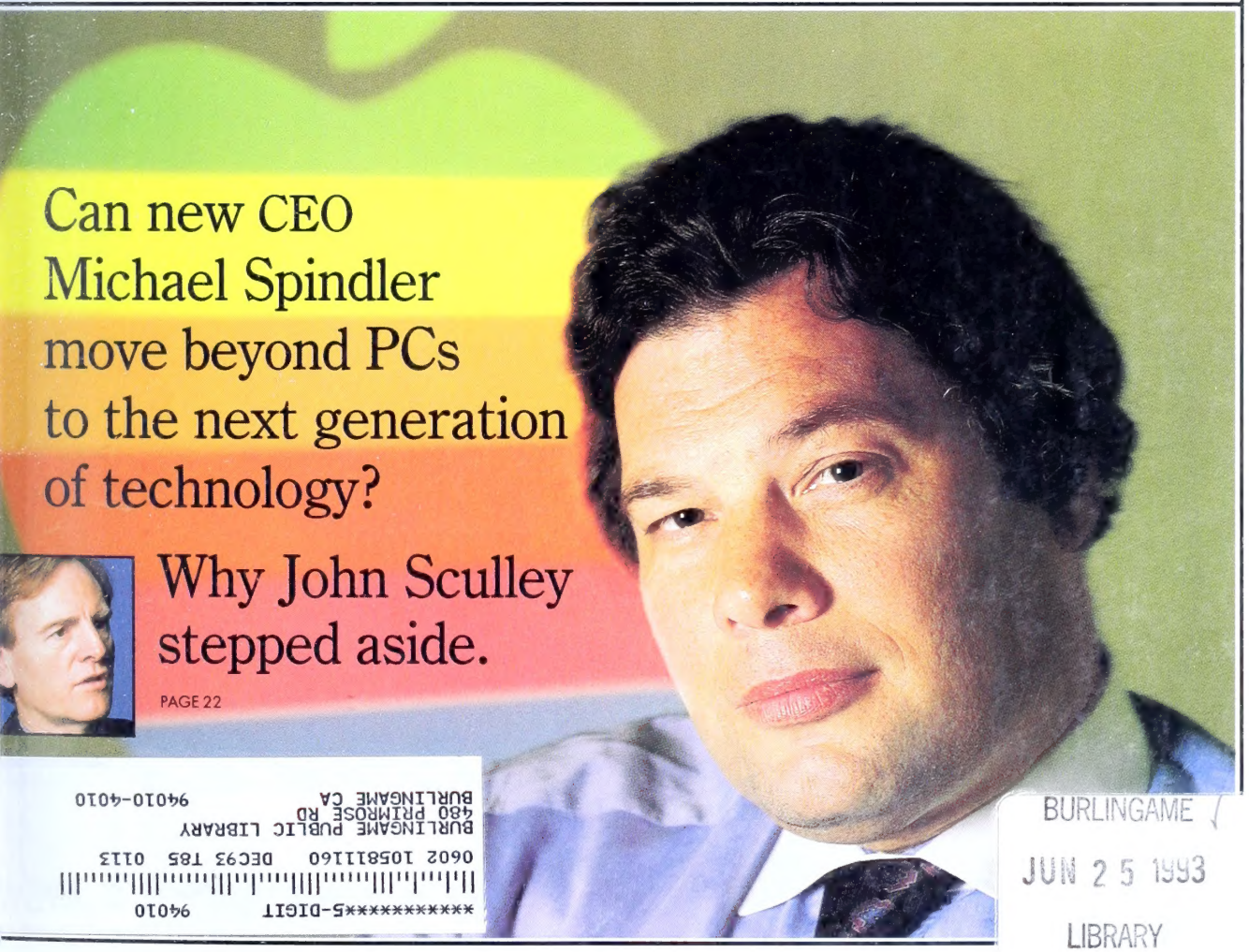
APPLE'S FUTURE



Can new CEO Michael Spindler move beyond PCs to the next generation of technology?

Why John Sculley stepped aside.

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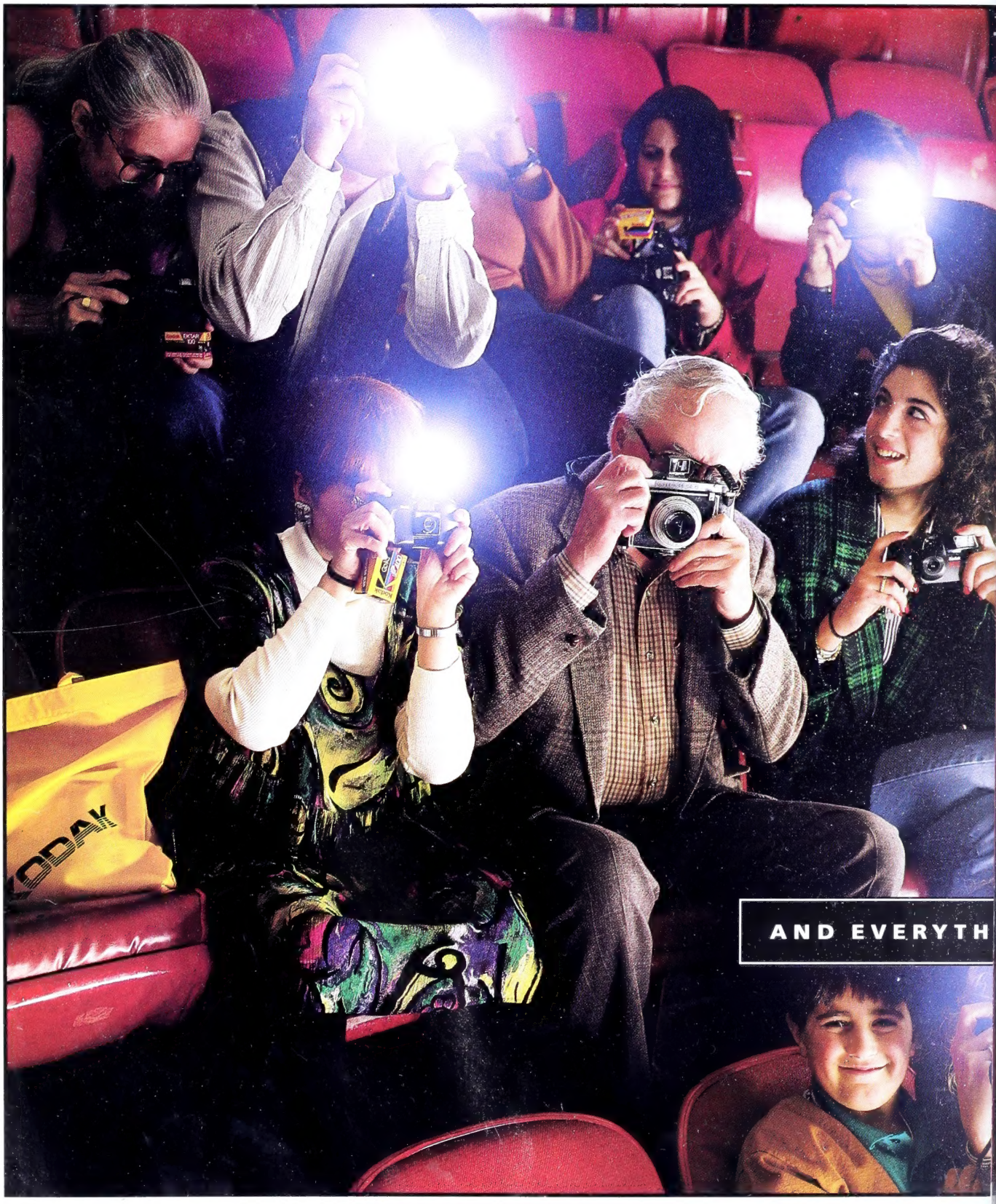

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BusinessWeek

JULY 5,

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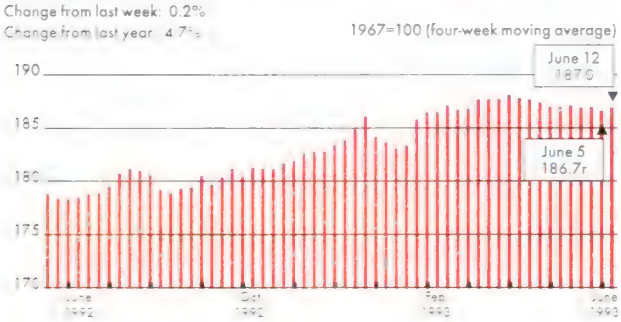
BusinessWeek Index

PRODUCTION

Change from last week: 0.2%
Change from last year: 4.7%



The production index increased during the week ended June 12. On a seasonally adjusted basis, electric-power output was up sharply, and rail-freight traffic, paperboard, and crude-oil refining output increased as well. Production levels of steel, autos, coal, and lumber declined, while truck and paper output was unchanged from the previous week. Before calculation of the four-week moving average, the index advanced to 188 from 186.2

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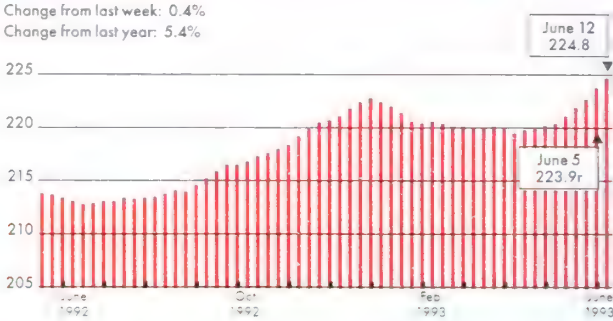
LEADING

Change from last week: 0.4%
Change from last year: 5.4%



The leading index moved even higher during the week ended June 12. A larg increase in the growth rate of M2 lifted the overall index, which was also helped by improvement in the growth of real estate loans and materials prices. These offse the negative signs of lower stock prices and slightly more business failures. Bond yields were unchanged for the week. Before calculation of the four-week moving average, the index rose to 227.5, from 225.3.

Leading index copyright 1993 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (6/19) thous. of net tons	1,840	1,808=	4.4
AUTOS (6/19) units	134,337	124,033r=	−2.6
TRUCKS (6/19) units	99,828	101,394r=	18.6
ELECTRIC POWER (6/19) millions of kilowatt-hours	62,580	59,920=	2.9
CRUDE-OIL REFINING (6/19) thous. of bbl./day	14,101	14,165=	0.5
COAL (6/12) thous. of net tons	18,304=	16,957	−5.2
PAPERBOARD (6/12) thous. of tons	818.9=	811.8r	−1.5
PAPER (6/12) thous. of tons	794.0=	796.0r	2.1
LUMBER (6/12) millions of ft.	461.3=	363.4	−6.8
RAIL FREIGHT (6/12) billions of ton-miles	21.2=	19.[illegible]	−0.9

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA[1], SFPA[2], Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (6/23)	109	107	125
GERMAN MARK (6/23)	1.69	1.66	1.54
BRITISH POUND (6/23)	1.47	1.50	1.90
FRENCH FRANC (6/23)	5.69	5.57	5.18
CANADIAN DOLLAR (6/23)	1.28	1.28	1.19
SWISS FRANC (6/23)	1.50	1.48	1.38
MEXICAN PESO (6/23)[3]	3.116	3.117	3.103

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (6/23) $/troy oz	367.100	368.000	6.8
STEEL SCRAP (6/22) #1 heavy, $/ton	111.50	111.50	23.9
FOODSTUFFS (6/22) index, 1967=100	204.5	202.7	1.2
COPPER (6/19) ¢/lb.	88.6	88.3	−16.7
ALUMINUM (6/19) ¢/lb.	54.0	54.3	−8.6
WHEAT (6/19) #2 hard, $/bu	3.31	3.44	−12.9
COTTON (6/19) strict low middling 1-1/16 in., ¢/lb	55.71	55.97	−6.8

Sources: London Wednesday fixing, spot market, Commodity Research Bureau, Metals Week, Kansas City market, Memphis market

LEADING INDICATORS

	Latest week	Week ago	% Chan year a
STOCK PRICES (6/18) S&P 500	446.73	446.16	10
CORPORATE BOND YIELD, Aaa (6/18)	7.32%	7.38%	−10
INDUSTRIAL MATERIALS PRICES (6/18)	95.4	95.9	−3
BUSINESS FAILURES (6/11)	369	362	−9
REAL ESTATE LOANS (6/9) billions	$400.4	$398.3r	−1
MONEY SUPPLY, M2 (6/7) billions	$3,484.8	$3,475.3r	1
INITIAL CLAIMS, UNEMPLOYMENT (6/5) thous.	344	347	−15

Sources: Standard & Poor's, Moody's, *Journal of Commerce* (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adju data on business failures and real estate loans

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Chan year a
ORDERS FOR DURABLE GOODS: MFG. (May) billions	$128.3	$130.3	6
BUDGET SURPLUS OR DEFICIT (-) (May) millions	−$36,957	$8,088	−21
IMPORTS (Apr.) millions	$48,871	$49,347r	12
EXPORTS (Apr.) millions	$38,383	$38,895r	5

Sources: Commerce Dept., Treasury Dept.

MONETARY INDICATORS

	Latest week	Week ago	% Chan year a
MONEY SUPPLY, M1 (6/7)	$1,072.4	$1,074.3r	12
BANKS' BUSINESS LOANS (6/9)	274.8	277.2	−3
FREE RESERVES (6/9)	765r	1,098	137
NONFINANCIAL COMMERCIAL PAPER (6/9)	155.4	158.7r	7

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed for two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	Ye a
FEDERAL FUNDS (6/22)	2.98%	3.14%	3.72
PRIME (6/23)	6.00	6.00	6.50
COMMERCIAL PAPER 3-MONTH (6/22)	3.24	3.24	3.89
CERTIFICATES OF DEPOSIT 3-MONTH (6/23)	3.23	3.17	3.84
EURODOLLAR 3-MONTH (6/18)	3.19	3.25	3.84

Sources: Federal Reserve Board, First Boston

=Raw data in the production indicators are seasonally adjusted in computing the BW index (chart), other components (estimated and not listed) include machinery and defense equipmen
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

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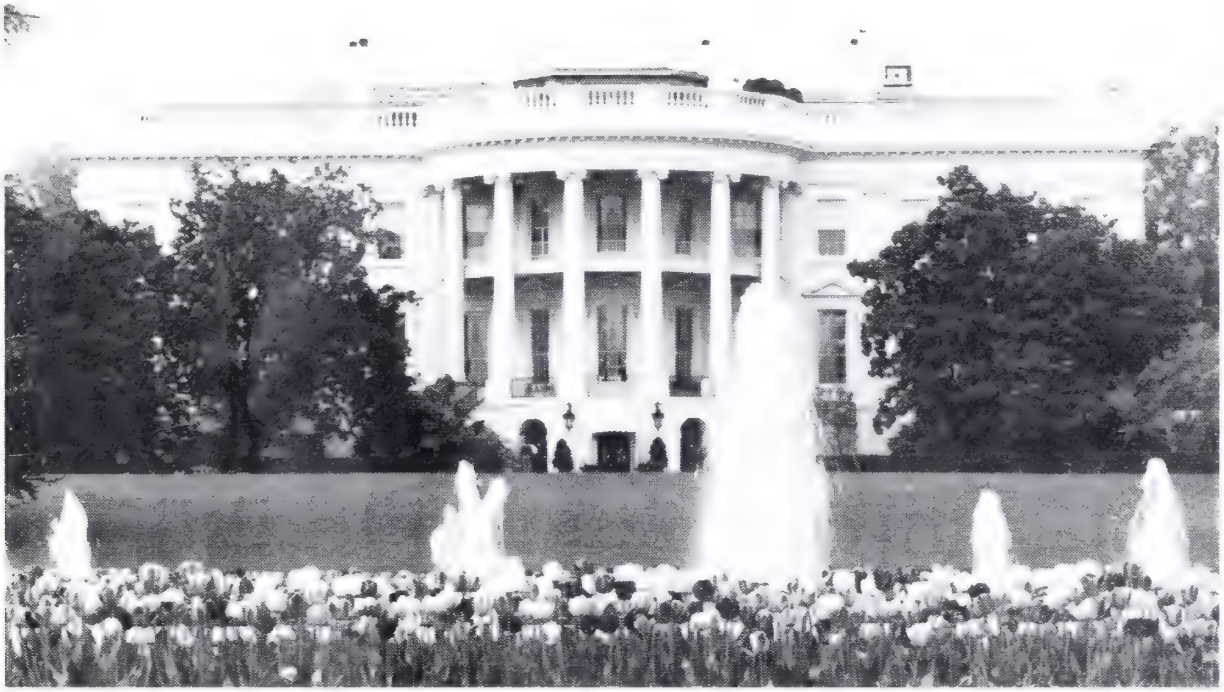

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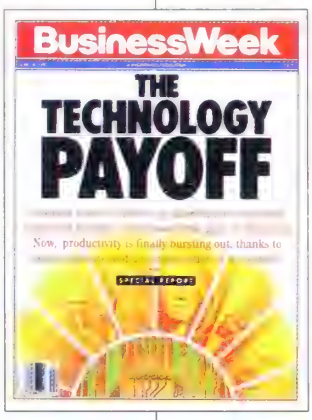
Readers Report

THE TECHNOLOGY PAYOFF: ARE WE THERE YET?

Technology has already swept over us ("The technology payoff," Special Report, June 14). It is no longer a technological change but a cultural change.

We are at a monumental cultural crossroads where print, TV, personal computers, phones, satellites, cable, and recorded formats are abruptly converging into a digital potpourri with wide-ranging concourse. New media configurations are powerful, inexpensive, highly interactive, individually controlled for self-pacing, ideally suited for independent learning, ultimately empowering to the user. Our rapidly changing media environment will likely bring a rate of cultural change over the next 15 years greater than we have experienced in the past 100.



Will the baby-boomer leadership adapt to change more readily as they replace George Bush's typewriter-equipped White House with interactive technology? Not necessarily. Lacking a market mechanism, slow-moving schools and universities are among the last of the great socialist-styled corporations, much like IBM, the old American Telephone & Telegraph Co., and Eastern Europe. We're simply not teaching how to manage change.

Glenn Ralston
Indianapolis

Your so-called reorganization of work is nothing more than concentrating on doing the right things. If you don't concentrate on effectiveness, any improvements in efficiency will be for naught.

The solution to improved productivity is not better software but rather a better understanding of business and its objectives.

Milt Bryce
Palm Harbor, Fla.

Although I applaud your bringing technology and productivity into the spotlight, I would like to point out that the jury is still out on many of the points you raise.

The effect of technology on the productivity of the company has been widely debated by economists for a number of years now. Reengineering, although currently in vogue, is certainly not new, and it has yet to be convincingly demonstrated that it yields predictably positive results. Little is known about how one successfully reengineers a business and even less about how one measures return on investment on this type of investment, in spite of what many consultants may claim.

In the meantime, the amount of money that has been spent on information technology is immense. (Although you do not describe how you arrived at your estimate of $1 trillion over the past 10 years, some estimates are several times that for the service sector alone.)

All this is not meant to imply that we are not on the verge of a major reshaping of the rules of competition and some of our basic and well-entrenched business models. I believe we are, and we should be excited about it. The benefits to the early adopters and adapters, if they are successful, are clearly large. The cost of change, however, is not small, and the rules of the game are still not clear.

Michael van Biema
Director
Center for Technology & Productivity
Columbia School of Business
New York

Many companies feel that investing in the latest hardware and software will be sufficient to keeping them competitive and profitable. What they fail to understand is that in addition to investing in the latest tools, they must also (and most importantly) invest in their own people. Invest all you want in

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A

ECONOMIC GROWTH ISN'T ALL DEMOCRACY HAS TO OFFER

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CORRECTIONS & CLARIFICATIONS

Figures on automated teller machine usage were misattributed in "An Energy goes off at the cash machine" (Top of the News, May 31). The source was Data Network News.

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WANT TO COMPETE WITH JAPAN? INVEST IN JAPAN

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SUMMER BOOKS: PLAYING CATCH-UP ON THE BEACH

To some people, summer reading means a novel the size of a concrete block, usually involving a foreign setting, an illicit electronic transfer of funds or data, a beautiful but possibly dangerous woman, a deadly secret, and sex between adults not married to one another. To some people, summer reading means a mystery. Any mystery.

I say: Save the fluff for snatches of reading on the train or in the dentist's waiting room. To me, vacation is a chance to catch up on more serious books that reward uninterrupted focus and long blocks of time. If you feel the same, here are some meaty titles to dig into—with a thriller and a picture book thrown in for good measure. They're all in paperback, so you can pack a few.

Topping the stack is David McCullough's friendly but balanced **Truman** (Touchstone, $15). Tracing the trials Truman faced after succeeding Franklin D. Roosevelt less than three months into FDR's fourth term, the biography is highly readable, even gripping. It shows that Truman's success and unpopularity both stemmed from his moral courage.

Truman's long run as a hardcover best-seller seemed to reflect a longing for the sort of integrity Truman symbolizes. If William Greider is right, disenchantment with the man at the top is but a symptom of what's amiss in American politics. In **Who Will Tell the People: The Betrayal of American Democracy** (Touchstone, $13), Greider says the government is in the grip of powerful interests and elites, foreign and domestic. While Washington accommodates them, ordinary folk see their standard of living fall and get stuck paying for fiascoes such as the savings and loan bailout.

Greider's work has a complement in John Kenneth Galbraith's slim **The Culture of Contentment** (Houghton-Mifflin, $9.95). A "fortunate and favored" U. S. elite, Galbraith argues, has extraordinary power to shape events and set policy—at the polls, in government, and in Corporate America. The result, he says, is an ailing economy and polarization between haves and have-nots.

From what we know now, confirmation hearings for Supreme Court nominee Ruth Bader Ginsburg won't make riveting TV. But thanks to **Capitol Games: The Inside Story of Clarence Thomas, Anita Hill, and a Supreme Court Nomination** by Timothy M. Phelps and Helen Winternitz (Harper Perennial, $14), you can replay the circus that ensued when Hill alleged that nominee Thomas had sexually harassed her. See again the Senate Judiciary Committee members, the handlers, the hangers-on. Hear again the remarkable televised discussions of erotomania and porn. What comes across powerfully is how the confirmation process has been degraded.

If you've been curious about **Sam Walton: Made in America, My Story**, by the late architect of the Wal-Mart discount-store empire, dip into it at a fitting bargain price (Bantam, $5.99). Written with John Huey, the book is long on company history, free-enterprise boosterism, and how-to, but short on introspection or intimate disclosures.

There's lots of drama in **Vendetta: American Express and the Smearing of Edmond Safra** (Harper Paperbacks, $5.99). Bryan Burrough probes Ameri Express Co.'s mid-'80s effort to r Safra's name after the Lebanese ban quit Trade Development Bank, wh he had sold to AmEx, and began pl ning a rival operation. Did then-C James D. Robinson III know of the tempted character assassination? B rough convinces us only that he pr ably did. The book unfolds like whodunit, and its milieu—the inter tional intelligence underworld—ha seamy fascination.

In **To the End of Time: The Seduct and Conquest of a Media Emp** (Touchstone, $13), Richard M. Clurm once a Time Inc. journalist and exe tive, assesses the Time-Warner merg He says Warner's boss, the late St Ross, romanced Time into making deal of the century for Warner, wh shareholders reaped billions. Forr Chairman J. Richard Munro's fears c takeover were also a key factor, he s gests. A new afterword covers Ro death and Nicholas J. Nicholas J ouster as president and co-CEO.

On the international front, t books—**Head to Head: The Coming E nomic Battle Among Japan, Europe a America** by Lester Thurow (Warr $12.99) and **A Cold Peace: America, pan, Germany and the Struggle for premacy** by Jeffrey E. Garten (Tim $12)—analyze the new global power b ance. Economist Thurow contrasts three regions' forms of capitalism and gues that to compete, the U. S. sho end its obsession with short-term pro and relax antitrust rules. Garten, w foresees a power triangle with contin ly shifting alliances, says U. S. think is too geared to military conflict. Her a chance to probe the mind-set of forr investment banker Garten, just no nated to head the Commerce Dep International Trade Administration.

Our thriller is Michael Crichton's **ing Sun** (Ballantine, $5.99). The plot Los Angeles gumshoe investigates a

ooks

rder at a Japanese conglomerate's . headquarters. The subtext: The old cop who helps him provides a ning denunciation of the Japanese racter, Japan's global ambitions, and vulnerability of U. S. institutions. suspense, *Rising Sun* is only mid- g. As polemic, it's mind-boggling. By edding in pulp fiction the message of critics of Japan as Clyde V. Presto- Jr. and Karel Van Wolferen, Crich- has taken it to a vast audience.

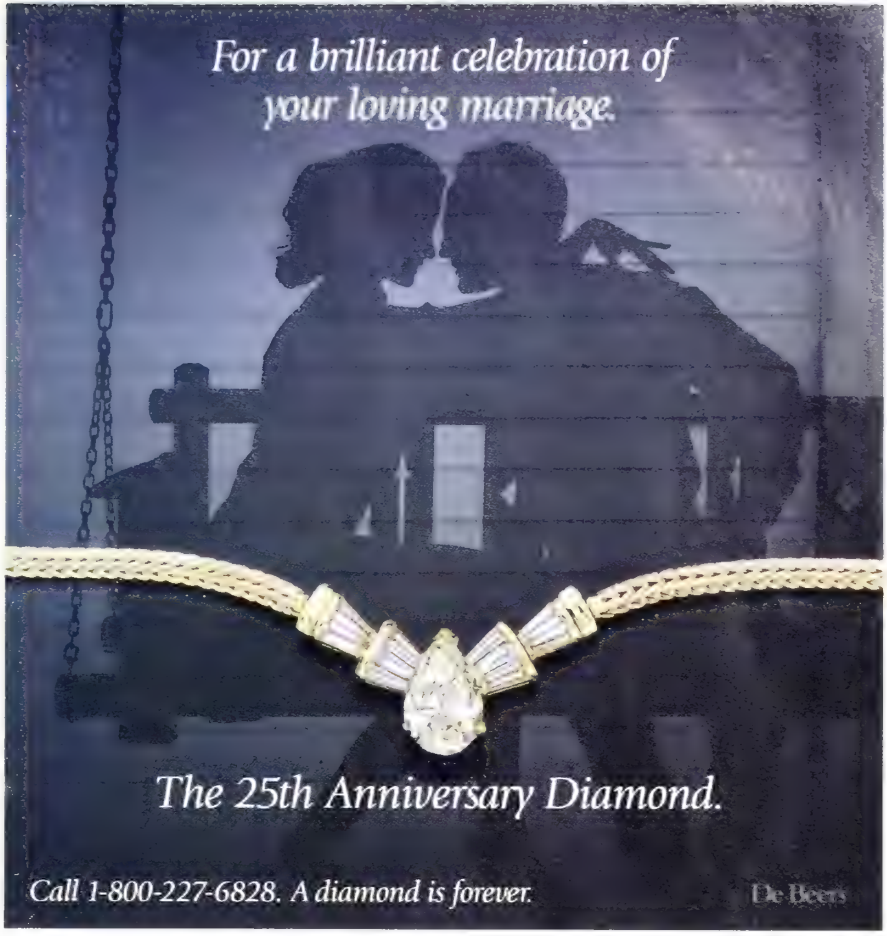
's Crichton's season; the film of his *ssic Park* just opened to record vds. Once you've been scared—or led—to death seeing a dinosaur chow n on a lawyer, you'll be ready for **Making of Jurassic Park** by Don y and Jody Duncan (Ballantine, $18). h color and diagrams, the oversized erback shows how the filmmakers le and moved those dinosaurs.

urassic Park has people discussing ther life might really be cloned from ent DNA—and whether such efforts d go disastrously awry. Similarly, ven Levy's **Artificial Life: A Report m the Frontier Where Computers t Biology** (Vintage, $13, August) ex- es the fringes of artificial intelligence the implications of creating soft- e-and-silicon "organisms." Asks Levy: ldn't new software critters that can s along complex genetic code and ve independently develop into some- g essentially—alive? Levy overreach- out it's fun to ponder whether people bestow their traits on the sterile 1s 0s of computer programs.

you care more about how technolo- s changing our lives right now, pick Neil Postman's **Technopoly: The Sur- der of Culture to Technology** (Van- , $11). Postman coins "technopoly" to cribe a society—like that of the U. S., says—in which technology dominates aspects of life. His main concern is computer-driven glut of information. ditional information filters—schools, gion, the family—no longer work, he s, so we depend on experts and bu- ucrats. What's lost is society's cul- l "narrative"—the history through ch people find meaning and purpose. conomist Juliet B. Schor has a differ- view of what ails us. In **The Over- rked American: The Unexpected De- e of Leisure** (Basic, $12) Schor claims , compared with 20 years ago, the rage American works the equivalent n additional month per year. Once get past the statistics, *The Over- ked American* is a fascinating mix of al observation and economic theory. e's to reading it in a beach chair.

BY DENISE DEMONG

Demong is BUSINESS WEEK's Books or.



UNCONVENTIONAL WISDOM

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UNCLE SAM'S FANTASY: TAXES WON'T AFFECT BEHAVIOR

BY PAUL CRAIG ROBERTS

In revenue forecasts, Washington forgets that changes in tax rates make people act differently—in buying, hiring, and investing. This leads to disastrous goofs: overestimating gains from tax hikes and the losses from cuts

Senate Democrats have done President Clinton and the economy a great service by axing his BTU tax on energy, but if they want to save his Presidency—and the recovery—they will have to go further and kill the entire tax bill.

The adverse impact of the energy tax on the poor was clear enough to Clinton's advisers, who set aside 40% of the projected revenues to beef up welfare spending to compensate poor Americans for what they would pay. The Senate, concerned with the harm to employment in energy-intensive industries, such as airlines, aluminum, fertilizers, and steel, took this reasoning a step further. Adding up the lost payroll and income taxes, it was clear that the tax was a revenue loser. It made no sense to take on so many special interests for a tax that would cost the government more money than it would bring in.

Since the energy tax's projected revenues of $70 billion were a figment of the estimators' imaginations, newspaper reports that Senate Democrats are struggling to cobble together other taxes to plug the revenue hole are nonsensical. As the tax would have produced no net revenues, there is no hole to plug.

The sorry episode of the life and death of this tax is a prime example of the political damage and public confusion wrought by static revenue estimates. Congress' Joint Committee on Taxation (JCT) and the Treasury's Office of Tax Analysis (OTA) base revenue estimates on the assumption that taxes do not affect behavior, sales, employment, profits, or investment. Consequently, estimators always overestimate the revenue gains from a tax hike and the losses from a tax cut.

SHRINKING SHIPS. Indeed, static revenue estimates are a major cause of the budget deficit. The JCT and OTA keep loading the government up with revenue-losing tax hikes. Examples abound. Remember the luxury tax on yachts, furs, jewelry, and private airplanes? Well, the facts are in: Internal Revenue Service filings show that the resulting job losses alone have cost the government $2.40 for every $1 of revenue. The airplane tax is the most amazing of all. In fiscal 1991, it brought in a mere $53,000 in revenues but cost $5.1 million in unemployment outlays.

Another example is the repeal in the 1986 Tax Reform Act of the tax deferral for earnings reinvested in the shipping industry (Subpart F). Estimators expected an additional $40 million a year, but studies by the General Accounting Office and Evans Economics reveal this to be a fantasy. The tax devastated the U. S. shipping industry. The U. S. fleet tonnage shrank by 28% during 1986-91, while world tonnage rose 25%. The vanished 8,0 jobs have cost the Treasury $60 million a ye in lost payroll and income taxes. When mul plier effects and lost state and local revenu are included, the annual cost of the tax ris to $160 million, or $4 lost for every $1 of pr jected revenue.

SLOW WRITE-DOWN. On occasion, tax estim tors do more than ruin companies, industri and the livelihoods of thousands of worke They bring the country to the brink of ru The real estate provisions in the 1986 ta reform legislation cost the U. S. at least fo times as much as the $60 billion tab for Dese Storm. The asset lives of commercial real e tate properties were lengthened from 19 yea to 31 years, which collapsed the present valu of the properties. Passive investors were c nied normal tax deductions, causing them walk away from their investments. The 4 increase in the capital-gains tax guarante no one would hold on for the long haul.

Ignoring the obvious economic and fina cial effects of these provisions, the estimato expected to raise approximately $33 billion new revenues. Instead, real estate values c lapsed, pulling down banks, thrifts, and fede ally insured savings and loan deposits. T cost of the deposit insurance bailout rang from $200 billion to $500 billion, dependi on how it is measured. Simply put, the pro sions cost the Treasury 6 to 15 times the pr jected revenues and are the main reason th the deficit exploded under President Bush. addition, approximately $1 trillion in real e tate values were wiped out, wreaking hav on the state and local tax base.

Static revenue estimates have proven be the worst kind of fraud, and it is amazi that no lawsuits have been filed. The JCT a the OTA claim it is too difficult to make the d namic estimates that take into account the fects of taxes on behavior. No doubt this an ysis would be difficult and imprecise, but imprecisely right analysis is better than a pr cisely wrong one, as in the cases of yacht shipping, and real estate.

Certainly, we do not need any more t hikes that swell the deficit. Yet Clinton's pl is based on the same invalid methodology f producing revenue estimates that predict Bush's 1990 tax increase would balance t budget. Clinton should note that, after Bush budget deal was enacted, the Congressior Budget Office raised its five-year deficit proje tions six times by an average of $220 billic Unless Clinton wants a bigger deficit, high unemployment, rising inflation, and a curren crisis to boot, he should hope that spec interests deep-six his entire tax bill.

PAUL CRAIG ROBERTS IS CHAIRMAN OF THE INSTITUTE FOR POLITICAL ECONOMY IN WASHINGTON

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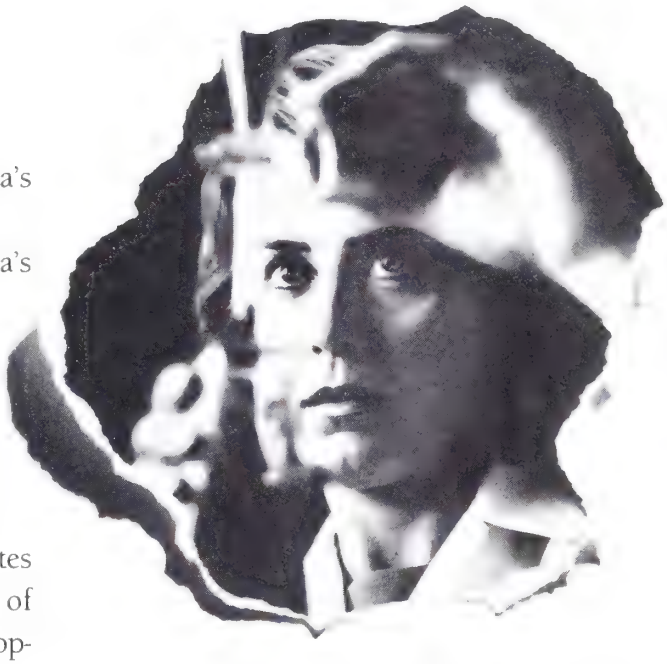

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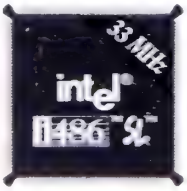

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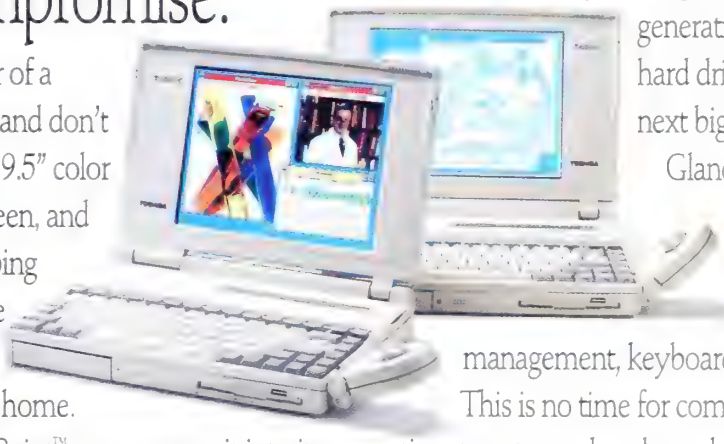

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BY GENE KORETZ

U.S. COMPETITIVENESS COULD PAY OFF BIG IN THE DECADE AHEAD

After shrinking by nearly 60% from 1987 to 1991, America's merchandise trade deficit widened last year and is clearly headed higher in 1993. Economist Joseph Carson of Dean Witter Reynolds Inc. is convinced, however, that the trade setback is a temporary phenomenon, resulting from the U. S. economy currently being out of sync with its recession-plagued major trading partners.

Once the other big industrial economies turn upward, Carson predicts, the trade deficit will shrink sharply.

U.S. COMPANIES FINALLY POST A TRADE SURPLUS

DATA: COMMERCE DEPT., DEAN WITTER REYNOLDS INC.

"America's basic competitive position," he says, "is extremely strong."

As proof, Carson points to a little-noticed yet startling development: a dramatic improvement in the trade performance of domestically owned U. S. companies vis-à-vis U. S. affiliates of foreign companies. Although the Commerce Dept. doesn't highlight this comparison, Carson derives the data by simply subtracting government data on the exports and imports of foreign affiliates from the overall U. S. trade statistics. The results are revealing.

As the chart shows, the trade deficits posted by U. S. operations of foreign companies have hardly reacted to the dollar's sharp decline since 1985—remaining in a narrow range of $80 billion to $90 billion. By contrast, the trade deficits of U. S. businesses plunged 74% from 1986 to 1990 and disappeared entirely in 1991. In that year, according to recently released data, U. S. companies posted a $14.6 billion trade surplus—their first in more than a decade.

Why the different responses to the dollar's fall? Since much of the trade flows of U. S. operations of foreign companies consists of intracompany shipments from overseas, notes Carson, the parent companies at first try to absorb the negative effects of currency shifts on their profits. Also, the falling dollar lowered the price tag of U. S. assets. This encouraged many foreign companies to make added investments in U. S. production and distribution operations that initially depend heavily on foreign products, parts, and materials.

Carson argues, however, that such dependence will inevitably decline in response to exchange-rate shifts and other developments, such as wage restraint and productivity gains, that have vastly boosted U. S. competitiveness. The trade surplus posted in 1991 by U. S. companies underscores the fact that the U. S. is now the low-cost producer among major industrial nations.

"GM's decision to move some auto production back to the U. S. from Mexico, and plans by BMW and Mercedes-Benz to set up plants in the U. S. are straws in the wind," says Carson. As America's productive capacity grows in the years ahead, he predicts, its trade performance will grow ever stronger.

SMALL-BUSINESS BORROWING PICKS UP SOME STEAM

Business borrowing may be stronger than loan data seem to suggest. While commercial and industrial bank loans have trended downward this year, Maury N. Harris of PaineWebber Inc. finds that demand for funds by small and midsize borrowers is growing.

He points to the Federal Reserve's May survey of bank loan officers around the country, which makes the observation that "in contrast to previous surveys, a significant number of respondents reported some easing of terms and standards on commercial and industrial loans." In the case of big businesses, that easing didn't have much impact, since they continued to pay off bank loans and shift their borrowing to nonbank sources.

But the loan officers also reported increases in demand from midsize borrowers and small companies. Harris notes that both groups have now registered increases in borrowing activity in four of the past five quarterly surveys. "Their growing appetite for funds," he says, "implies that the business climate is gradually improving."

BRISK U.S. AUTO SALES KEEP CANADA'S CAR PLANTS HOPPING

Here's a puzzle: Domestic-make c and light-truck sales have rebour ed nicely since April, and inventori have fallen sharply. Yet U. S. motor v hicle output has been lagging and act ally fell by 3.6% in May. Why has Detroit revved up its assembly lines?

According to economist Sam Nakag ma of Nakagama & Wallace Inc., mu of the answer is to be found north of t border. Detroit builds a lot of its cars Canada, and so far this year, its Car dian subsidiaries have boosted car ou put by 32.6% over 1992, even thou Canadian car sales are down 7.7%.

To be sure, Detroit's Canadian su sidiaries always assemble a lot of ca that are sold in the U. S. What's unus al this time around, says Nakagama, that many of the best-selling models a being made only in Canada. Chrysl Corp.'s vehicle sales were up 44.6% May over a year ago, mainly becau of its hot-selling LH models, which a currently being assembled exclusive in Canada. Ditto for Ford Motor Co popular Crown Victoria.

In short, at least for the momer brisk auto sales are helping Cana more than the U. S. The trade defi in motor vehicles with Canada hit billion in April, notes Nakagama, a weak auto output in May subtract 0.1% from U. S. industrial production.

NEW DATA FLASH A WARNING SIGNAL ON INFLATION

Is the phrase "productivity-led reco ery" turning out to be a misnome Only a few months ago, economists we heralding the rapid productivity gai of recent years as proof of an endurir productivity breakthrough.

Now, there are doubts. The gover ment reports that nonfarm productivi dropped 1.6% last quarter, as sluggi growth coincided with upwardly revis employment gains. While the latest dr may turn out to be a statistical anoma economist Anthony J. Vignola Jr. of K der, Peabody & Co. notes that emplo ment and workweek data in rece months suggest that productivity headed for another fall in the seco quarter. "Unless the situation change he warns, "the outlook is for higher o put costs and inflation pressures."

ERIC HOFFMAN/BW

BY JAMES C. COOPER AND KATHLEEN MADIGAN

'HINK THIS IS BAD? ;ROWTH OVERSEAS IS EVEN WORSE

While the U. S. economy is far from robust, it is now enjoying the fastest growth in the industrialized world. But there's a downside: nerica's merchandise trade deficit has just posted the gest two-month gap in five years, and trade will remain drag on the economy well into 1994.

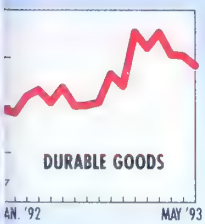
Through the first quarter, the U. S. economy has grown ;% from a year ago, while the remainder of the G-7—the orld's seven largest industrial powers—has watched eir economies decline at a 0.4% pace. As a result, a owing appetite for imports, along with sagging foreign mand, has cut deeply into the U. S. recovery. Without e widening trade gap, U. S. growth would have been a l percentage point faster.

The latest bad news: That drain on growth continued in e second quarter. After posting a deficit of $7.9 billion in bruary, the gap exploded in March, to $10.5 billion—a ır-year high. Most analysts expected a shrinkage in ril, back to its six-month trend of about $8 billion. Inead, the deficit remained at $10.5 billion.

INDUSTRY IS GETTING HIT FROM ALL SIDES

This deterioration may well explain part of the manufacturing sector's recent sluggishness. Orders for durable goods fell by 1.6% in May, their third consecutive cline (chart). May unfilled orders dropped 0.9% to their vest level since November, 1988, mainly reflecting a inking backlog in the aircraft industry.

FACTORY ORDERS ARE DRYING UP



DATA: COMMERCE DEPT.

You would expect manufacturing to share in, if not lead, the recently improved tone of the economy. The Federal Reserve's latest summary of economic conditions says that "business activity was increasing at a slow to moderate pace" in most of the 12 Fed districts in May and early June. Also, the report says that manufacturers anticipate a moderate expansion.

But right now, factories are getting hit from a number sides. Retailers are working down their excessive inven-ies that had built up during the winter storms, and so ey are ordering less. Uncertainty over taxes and the unpected loss of the proposed investment tax credit are o depressing demand. And defense cuts are a continu-; drag.

On top of all that is the growing problem with forn trade. U. S. manufacturers depend on foreigners to buy about one-fifth of their output, but weak growth overseas is taking away some of that demand. At the same time, imports are grabbing a record 24.3% of U. S. demand for goods other than oil.

JAPAN'S SLUMP MAY BOTTOM OUT SOON

Skewed world growth, and the policy cooperation needed to reduce its drag on the U. S., will be high on President Clinton's agenda when he attends the G-7 economic summit in Tokyo on July 7. Clinton would like to see Japan spend more to stimulate its economy, and he would like lower interest rates in Europe. Both wishes are aimed at spurring foreign demand for U. S. goods.

But even if Clinton got his way, the world economy still would be far from a solid recovery. Japan already has put together a huge package of fiscal stimulus, but it will take time to work. Also, the yen's 15% appreciation against the dollar since January will take a year or more to influence trade flows between the two countries.

Recent data from Japan, including the third consecutive monthly gain in the index of leading indicators, suggest that the Japanese slump may bottom out in the second half of this year, but few international analysts expect the economy to pick up steam until 1994.

CHANGING TRENDS IN U.S. EXPORTS

Regions	JAN.-APR. TOTALS* 1992	1993
NORTH AMERICA	14.9%	7.2%
WESTERN EUROPE	1.2	−3.8
SO. & CENT. AMER.	24.9	8.4
JAPAN	−1.6	−1.8
OTHER PACIFIC RIM	4.6	11.6
OPEC	32.1	−12.9
TOTAL EXPORTS	6.8	3.2

*PERCENT CHANGE FROM A YEAR AGO
DATA: COMMERCE DEPT., BUSINESS WEEK

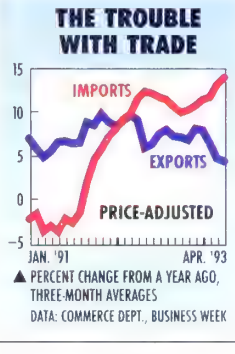
The same is true for Europe, which is in far more trouble than Japan. Although Britain is slowly recovering, Continental Europe is succumbing to the pressure of high German interest rates. Germany is trying to juggle the costs of unification and unacceptably rapid growth in both money and inflation against the flagging economy's need for lower interest rates.

The result is Germany's worst recession in more than 30 years. And the rest of Europe is stuck with 11% unemployment, with no hope for a rapid turnaround. That's because European governments face large budget deficits and do not have Japan's fiscal flexibility. That leaves monetary policy to provide stimulus, but Germany, which usually leads Europe out of recession, is cutting interest rates only grudgingly.

The export side of the U. S. trade ledger still looks favorable, but not nearly as positive as it did last year (table). Exports dipped by $500 million in April, to $38.4 billion, reflecting broad declines. Through April, exports are up 3.2% from the same period in 1992, but a year ago,

they were growing by 6.8%. Export growth has slowed in almost all major regions. Only the rapidly growing Pacific Rim countries, excluding Japan, have accelerated their purchases of U. S. goods.

Exports to Europe, however, have declined by 3.8%, and shipments to Japan are off 1.8%. Europe and Japan buy one-third of America's exports. But more discouraging is the steep falloff in the growth of exports to South and Central America. Shipments are up by 8.4% from last year, but in 1992 they grew at a 25% clip, accounting for a big chunk of U. S. export growth.



▲ PERCENT CHANGE FROM A YEAR AGO, THREE-MONTH AVERAGES
DATA: COMMERCE DEPT., BUSINESS WEEK

The overall export slowdown reflects weaker demand for U. S. capital goods other than automobiles. Food and beverage shipments also have slowed sharply. Auto exports, though, are holding up well. Through April, they are up 17.7% from a year ago, about the same as last year's 18.7% pace.

For the rest of the year, exports are likely to keep growing, but considerably slower than their 1992 pace. Exports to Canada, Latin America, and the Asia-Pacific countries will supply the support, as Europe and Japan try to free themselves from the grip of recession.

ADRIFT IN A SEA OF IMPORTS

The real trouble brewing in the trade outlook, however, is imports. Because of the export slowdown, the negative impact on the trade deficit of America's seemingly insatiable hunger for imports is all the more visible. Foreign goods are coming ashore nearly three times as fast as exports are going out (chart).

After surging $5.2 billion in March, to a record $49.3 billion, imports fell back by only $500 million in April. Imports are likely to retrace more of their recent strength in May. One hint of that: Customs duties, after seaso adjustment, dipped by 7% in May. But the uptrend of i port growth remains disturbingly steep.

All major import categories in April stayed near th high March levels. As a result, price-adjusted impo began the second quarter some 19% above their fir quarter average, at an annual rate. That implies th nonoil imports' share of U. S. spending on goods, alrea at a record, rose even more in the spring period.

In particular, the import surge has sliced in half Am ica's once-sizable trade surplus in capital goods. That flects the increasing market share that foreign-made hi tech equipment is grabbing during the current boom U. S. capital spending for such items.

Imports are coming ashore at a faster clip from all major regions (table). Through April, purchases of foreign goods are up 10.5% from a year ago. For the newly industrialized nations along the Pacific Rim as well as Latin American nations, the continued rise follows double-digit gains in 1992.

WHERE IMPORTS ARE COMING FRO

Regions	JAN.-APR. 1992	TO 1
NORTH AMERICA	9.1%	1
WESTERN EUROPE	2.2	
SO. & CENT. AMER.	15.6	
JAPAN	5.1	
OTHER PACIFIC RIM	16.0	
OPEC	−11.1	1
TOTAL IMPORTS	6.7	1

*PERCENT CHANGE FROM A YEAR AGO
DATA: COMMERCE DEPT., BUSINESS WEE

Those increases may yet turn out to be good for the U. S., since these developing countries also have been lar buyers of American goods. When producers in Bra China, Mexico, and Singapore export goods to the U. they in turn earn the hard currency needed to imp more American-made heavy machinery and electron necessary to build up their industrial bases.

For now, though, the U. S. export machine is all revv up with no place to go. After the cost-cutting and prod tivity enhancements of recent years, combined with t current highly competitive exchange value of the doll U. S. manufacturers will have to hang on while the rest the industrialized world catches up.

THE WEEK AHEAD

LEADING INDICATORS

Tuesday, June 29, 10 a.m.
The government's composite index of 11 leading indicators that gauge the economy's future growth path likely edged up by just 0.2% in May, after an even smaller 0.1% rise in April.

NEW SINGLE-FAMILY HOME SALES

Tuesday, June 29, 10 a.m.
New houses probably sold at an annual rate of 700,000 in May, according to the median forecast of economists surveyed by MMS International, a division of McGraw-Hill Inc. Sales are expected to fall back in May, after they surged by 22.7%, to a 751,000 annual clip, in April. Still, excluding the April jump, the projected May pace would be the best sales performance in nearly four years.

FACTORY INVENTORIES

Wednesday, June 30, 10 a.m.
Manufacturers likely kept their inventories flat in May, after 0.2% gains in each of the preceding three months. That's suggested by the weakness in new orders and the meager 0.2% increase in factory output in May.

CONSTRUCTION SPENDING

Thursday, July 1, 8:30 a.m.
Construction outlays probably rose by 0.7% in May, after falling for two straight months, including a 0.4% dip in April. Increased homebuilding is lifting the overall construction sector.

NAPM SURVEY

Thursday, July 1, 10 a.m.
The National Association of Purchasi Management's index of industrial activ likely stood at 51.5% in June, lit changed from its May reading of 51.1

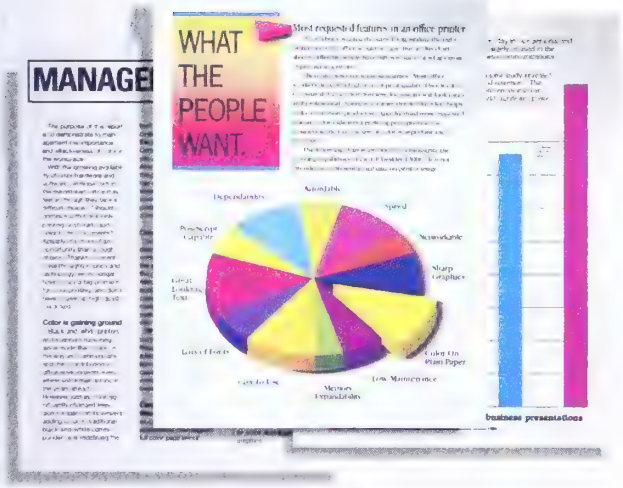
EMPLOYMENT

Friday, July 2, 8:30 a.m.
The good news from the MMS forec survey is that nonfarm jobs likely r by a solid 155,000 in June, after 209,000 advance in May. The bad ne is that manufacturing jobs, already do 133,000 over the past three mont probably did not rise in June. Desp better hiring, the unemployment r likely remained at 6.9% in June.

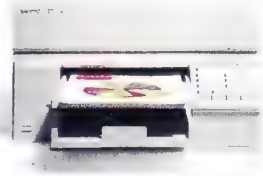
ERIC HOFFMAN/N BW

Liberal. Conservative.

Populist.



An office printer for everyone.



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DeskJet Printers Make it happen.

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APPLE'S FUTURE

CAN NEW CEO MICHAEL SPINDLER BRING BACK THE GLORY DAYS?

t is nearly noon on June 18, and it's already a scorching 98F outside. But even with the extra burden of the t, John Sculley is showing little of wear and fatigue that a decade as f executive of Apple Computer Inc. begun to etch onto his lean face. s day, he's looking cool and chipper in green bow tie—and well he might. of 5:30 that morning, Sculley handed r his CEO responsibilities to President hael H. Spindler, his chief lieutenant e 1990. For the time being, Sculley stay on as chairman, scouting out opportunities for Apple. But the -to-day demands of running the $7 on company are no longer on his ulders.

n fact, the shoulders that are going bear the burden of steering Apple ough one of the most difficult transi- s in its 17-year history have just ked into Sculley's office. And sudden- Spindler, a hulking man next to the chairman, is the one who's looking eworn as he plops down in Sculley's mped work space to explain the job tch. For the record, the two say their t in duties is causing undue fuss. er all, Spindler has been the steady rational hand at Apple for three rs. And Sculley has been the vision- crisscrossing the country looking new markets. "It fulfills the status," says Spindler. Adds Sculley: "This t any big deal in my mind."

laybe not, but to the outside world— many insiders as well—the shift in le's executive suite is a momentous nt indeed. After years of growth fu- by its spectacularly successful Mac- sh computers, Apple is now facing most daunting technological and nagement challenges since its biggest is: the financial losses and big lay- of 1985, when Sculley originally sted full control of the company y from its legendary co-founder, Ste- P. Jobs.

ER FIRE. In just one month, Apple launch a bold, but risky, quest to e beyond personal computers into so-called "digital revolution," where puters, communications, consumer tronics, and entertainment converge. early August, Apple is expected to lly introduce its much delayed New- a handheld "communicator" that function as everything from a date k to a personal data base. Over time, vton is expected to be followed by a am of other products that will pull le even further from its PC roots— tronic books, on-line services, elec- ic television guides, interactive TV.

he question now: Will Apple under ndler be able to harness the financial and management talent it needs to propel itself into this brave new world? It's not just that Spindler must steer Apple into risky, uncharted markets full of formidable new rivals such as Time Warner Inc. and cable giant Tele-Communications Inc. He must also, somehow, convince consumers that these are products they want to buy. Skeptics, in fact, contend that the markets Apple is targeting may not really develop for years. Joel J. Kocher, Dell Computer Corp.'s president of worldwide sales, marketing, and services, derides personal communicators such as Newton as "Sculley's dream," and adds: "Maybe it's a good dream three to five years from now, but who can see that far? Computer companies should be focusing on market share to insure they will even be around."

Indeed, as it stands now, Sculley's multimedia move faces considerable problems. The Newton was expected to be out last January, but it has been dogged by delays and technical glitches. Apple, moreover, has been noticeably absent from a recent spate of dealmaking that has linked such companies as Time Warner and Silicon Graphics; Time Warner and U. S. West; and Microsoft, Intel, and General Instrument. Now, a megamarriage is being rumored between Time Warner, TCI, and Microsoft.

Apple may not be shut out entirely: Insiders say it is close to finally doing a big deal of its own, probably by this fall. The company won't comment for the record, but insiders confirm that Apple has been holding talks with American Telephone & Telegraph Co. to create a joint venture in communications, most likely involving personal communicators. They say the company also has been talking with US West Inc. and Turner Broadcasting System Inc.

Spindler must keep moving the company forward—just as its main business faces its most serious crisis since 1985. Today, Mac's sales are growing far more slowly than those of such personal-computer competitors as Compaq, Dell, and AST. Even troubled IBM is growing faster in PCs. Sculley himself took over after slowing Mac sales sent the company into a tailspin. And now, as in 1985, Apple has no potentially huge products in its pipeline to take up the immediate slack. Newton won't help much—it's a low-margin, low-price product that will go for $1,000 or less. The best hope for restoring margins, a critical new Mac technology dubbed PowerPC and based on technology developed with IBM and Motorola Inc., won't be ready until 1994.

RIGHT STUFF. Meanwhile, Apple's market share is stalled around 13%. A bid to boost sales with aggressive price-cutting will hurt profits: On June 9, Apple warned that second-half earnings will fall below year-ago results. Wall Street now expects the company's fiscal 1993 earnings to dip 10% below 1992's $530 million. A write-off from coming job cuts, analysts warn, means that Apple may even post a net loss in its fiscal fourth quarter, which ends Sept. 30. Sales for the year, meanwhile, are expected to come in at $8 billion, vs. $7.1 billion in 1992 (charts, page 25). Wall Street is clearly worried about the trend: Apple's stock has declined some 25% since June 4, to about 41. The danger is that the high margins that Apple has long counted on to fund the heavy research and development spending that it

APPLE'S TECHNICAL TRIUMPHS...

APPLE I Brings affordable computing to the masses

THE MACINTOSH Sets a new standard for easy computing by using graphical images to represent commands

TV ON A PC Apple pioneers multimedia with a Mac loaded with affordable software incorporating video, sound, and animation

...AND ITS DIGITAL DREAMS

PERSONAL DIGITAL ASSISTANTS Starting with the Newton in August, Apple hopes to produce hand-held devices for scheduling and communicating that can recognize handwriting and easily fax information

MULTIMEDIA PLAYERS These hand-held devices, which will incorporate CD-ROM storage, will act like electronic reference books; they're due in late 1993

ON-LINE ELECTRONIC SERVICES Later, Apple hopes to deliver airline travel schedules, television listings, or up-to-the-minute movie reviews via its own computer-based service

TELECOMMUNICATIONS Future digital assistants and multimedia players will be able to communicate using cellular phone-like technology

INTERACTIVE TV Further out, new software will let a viewer choose the plot of a movie or guide a character's actions

DATA: BUSINESS WEEK

needs to churn out creative products are gone for good.

Apple's seven-member board of directors, primarily made up of early Apple investors and company insiders, denies that the problems—or their own paper losses—culminated in Sculley's being forced aside. Indeed, Sculley says the change was his idea and contends he and Spindler will continue to "work like a left hand and a right hand together." He and Spindler also insist that Apple will continue to follow its path of expanding beyond PCs into new, multimedia technology. "We do not have a new playbook," Spindler says.

But Apple board members acknowledge that they all agreed the company now needs a tough cost-cutter who won't shrink from the steps needed to get the company through a difficult transition. Computer executives believe the task was one an exhausted Sculley didn't have the heart to perform. "The spiraling price declines of personal computers mean that [Apple] requires changes in its cost structure," says board member Bernard Goldstein, who is managing director of investment bankers Broadview Associates in Fort Lee, N.J. "And that could be best done by Spindler."

Sculley himself called the June 17 board meeting at Apple's Cupertino (Calif.) headquarters where the change was ratified, Goldstein says. Both Sculley and Spindler made presentations on what they called the "short-term" profit pressures facing the company, and Sculley suggested that Spindler take over as CEO. Goldstein says Sculley had been preparing the board for such a move for more than a year, partly because he and his wife want to spend more time on the East Coast, where they have family, friends, and a brand new house in Greenwich, Conn.

Goldstein says outside directors easily decided that Spindler has the right stuff to run the company. "I won't say it was unanimous," he says, but adds that Spindler was backed by a "broad consensus" of members.

"UNFRIENDLY INDUSTRY." At Apple, managers are already girding for layoffs. Insiders say Spindler will cut up to 2,300 of Apple's 14,500 workers in coming months. Spindler predicts that new products such as Newton will quickly take off and start to pay for themselves, giving him time to "reset the economic model for the Macintosh and make it much more competitive with the rest of this very unfriendly PC industry." But if he can't get Apple's costs in line fast, rabid competition may force him to cut deeply into R&D. Apple spends 8% to 10% of its revenues on R&D, three times as much as its main PC rivals.

Spindler will have to cut deeply. Top executives were told on June 18, the day Spindler was named to his new job, to begin preparing lists of places where cost savings could be made. Insiders say Spindler may eliminate 900 jobs in its U.S. sales and marketing operation. Top execs also were warned that these layoffs w go deeper into top management th past cuts.

Many Apple employees expect a lot "director" jobs to go—managers who port directly to vice-presidents. It's a expected that, unlike the past, Appl R&D group won't be protected. Insid figure up to 10% of Apple's several h dred system software engineers m lose their jobs. Also in danger are the called "creative" budgets of less th $100,000 that are parceled out for e ployees who have cooked up a new pr uct idea they want to explore. As a insider puts it: "The stuff that's rea important stays. The rest goes."

To help with the tough decisions, Sp dler and Sculley already have assemb a strong management team (table, pa 28). The key player in the next t months will be Joseph A. Graziano, A ple's straight-shooting CFO, who is charged with slim-

HOW APPLE HAS GROWN

APRIL, 1976
Apple Computer introduces the first mass-market computer, the Apple I.

APRIL, 1977
The Apple II, which becomes a cash cow for nearly a decade, is unveiled.

SEPTEMBER, 1980
The Apple III makes its debut. This feature-heavy, expensive dud is plagued with technical glitches.

DECEMBER, 1980
Apple goes public. The company's shares are offered for $22 each.

JANUARY, 1983
Lisa, Apple's attempt to make a machine with lots of bells and whistles, is announced. But at $10,000, the machine is too pricey and too slow. Apple kills it two years later.

APRIL, 1983
John Sculley is elected CEO. Co-founder Steve Jobs becomes Apple's technical guru.

JANUARY, 1984
The future revealed: Apple's first Macintosh is introduced.

FEBRUARY, 1985
Co-founder Steve Wozniak resigns from the company.

SEPTEMBER, 1985
Jobs resigns. Apple's n sales reach $1.9 billion

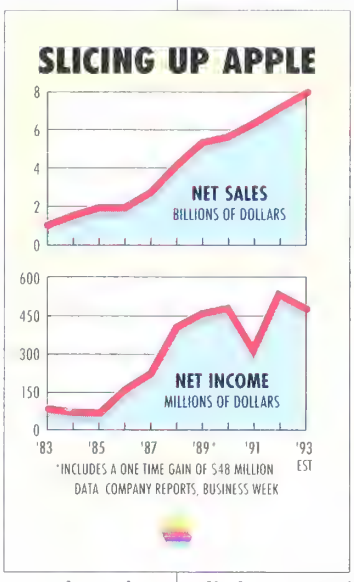
SEPTEMBER, 1989
The Mac Portable, App first laptop, is announce after significant delays. Weighing 16 pounds a carrying an equally hef price, it quickly become industry joke.

DATA: BUSIN

the company down. Other impor- team members: G. Fred Forsyth, a r vice-president who is charged the Mac's product development and ely to be given the job of simplify- he Mac lineup, probably reducing umber of models in the process. then there's Ian Diery, the sales marketing executive vice-president will have to pare back sales and eting. They and other key execu- met in an all-day session on June help map out Spindler's strategy. ning is immune," says Graziano. ndler will have to decide just how o let Apple's margins fall. Lately, e has gotten out of step with plum- g PC prices, leaving Mac prices 20% % higher than those of rival models. une 14, it cut computer and periph- prices up to 26%, and Graziano says e plans to be "even more aggres- in coming months. That will eze gross margins, which are higher rivals.' In 1993's first quarter, Ap- gross margin was 38.5% vs. Com- 22.9% and Dell's 16.8%, says mar- esearcher Dataquest Inc. Graziano s that Apple's gross margins are ding south" but declines to say how Some insiders say the company is ting 22% to 23%.

TAL REVOLUTION." But Spindler, a nosed computer-industry veteran, s that slashing prices and costs enough. The 50-year-old Spindler also get Apple's product line back ack. With a master's degree in engi- ng from the prestigious Rheinische hochschule in Cologne, Spindler s deeper into the technical bits and bytes of products than Sculley ever did (page 26).

While Spindler cranks out new Macs and PowerBooks, he and Sculley will be trying to steer Apple into the so-called digital revolution, where everything from televisions to telephones are making the conversion from old analog technology to digital. Apple's trademark has long been software that makes complex computers easy to use. Now, the company wants to do the same in the new digital world—in handheld devices it calls "personal digital assistants." To do this, Apple formed its personal-interactive-electronics division a year ago. Housed in a towering glass and white latticework building, part of Apple's new $200 million R&D center, the PIE group is working feverishly on new generations of technology. Newton will be its first product, but Graziano already predicts the division will turn a profit in fiscal 1994.



First, however, Spindler must make sure the Newton finally ships to customers. The little machine is described as an easy-to-use cross between an electronic organizer and an electronic notepad, with communications technology that allows data to be zapped off to a fax machine or computer back at the office.

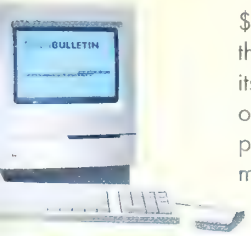
While many have praised the concept, the months have dragged on. Already, a competitive product from AT&T and startup EO Corp. is on the market. And Tandy Corp. and Casio Computer Co. will soon deliver their version. Apple's holdup: Newton's complex software, which recognizes hand printing. The software design is done—what developers call "locked and loaded"—and Sculley claims nearly all the software bugs have been worked out of it.

To get to that point, Apple set up a "war room," where the walls are plastered with "to do" lists. To work out bugs, Steve Capps, Newton's software guru, is holed up with other key software engineers in his San Carlos (Calif.) hilltop home, now dubbed "Nerd Hill." They are working nearly round the clock trying to stamp out the glitches, stopping only to sleep, eat, or play a vicious game of ping pong—generally at 4 a.m. "We're working 26-hour days," a weary Capps says.

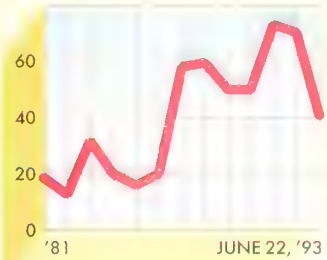
But analysts aren't convinced Newton ever will be a hit product—no matter how quickly Spindler can shove it out the door. Some expect Newton will generate sales of only $50 million in its first 12 months on the market. Others say it may be as high as $200 million. Howev-

, 1990
pindler

, 1990
Classic, at $999, ebut as Apple's first



APRIL, 1991
Shares hit all-time high of 72 .75



OCTOBER, 1991
The PowerBook—Apple's first notebook computer—is unveiled. This megahit generates some $1 billion in annual revenues. At the same time, Apple announces its Quadra line of super-powerful machines

OCTOBER, 1992
Apple announces its Duo systems—slimmed-down PowerBooks that fit into "docking stations" for use on a desk.

SEPTEMBER, 1992
Performa, a family of low-cost Macs, is announced. Apple decides to sell the machines through consumer-electronics stores, not computer dealers.

FEBRUARY, 1993
Apple introduces the LC III, a more powerful member of the LC family, now Apple's best-selling computers.

JUNE, 1993
Sculley steps away from CEO job to serve as chairman only. Spindler replaces him in day-to-day operations.

AUGUST, 1993
Newton, Apple's first handheld communicator, is due to be shipped. The machine will sell for less than $1,000. Also due then: Apple's "Cyclone" and "Tempest" multimedia machines, which are supposed to recognize voice commands.

er, they all agree that Newton will have razor-thin profit margins.

Spindler, nonetheless, exudes confidence about Apple's long-term strategy and its PIE division. "There are absolutely real products and real technologies coming out," he says. And other insiders say privately that at least two more Newtons are in the works: a stripped-down $500 version and a more expensive model that will contain a cellular phone. There also is speculation Apple will rename its first Newton product the PowerPad. The Newton name would instead apply to the underlying software, which Apple is licensing to other companies in an effort to make it a personal-communications-industry standard.

So far, Apple has five licensees expected to use the Newton technology—Sharp Electronics, Motorola, Cirrus L ic, Siemens Private Communications S tems Group, and Kyushu Matsus Electric. They are key to Apple's pr expectations for Newton. "Now, we have these businesses stand on t own feet, financing themselves," S dler says, vowing that will "absolut happen in the next year. Some Ap watchers speculate that he may eve

'THE UNSUNG HERO OF APPLE'S SUCCESS'

Apple Computer Inc.'s chief executives have mostly been larger-than-life personalities. First there was Steve Jobs, the smooth-talking, smooth-looking California native who made himself a folk hero by turning a garage hobby into a wildly successful computer company—all by the time he was 30. Later, there came John Sculley, the publicity-savvy former PepsiCo marketing man turned high-tech visionary, who hobnobs with the Clintons and is a media favorite when it comes time for someone to talk up the new world of interactivity, multimedia, and the like.

The mold has just been broken. Michael H. Spindler, Apple's new CEO, is a stout 50-year-old German who is rarely quoted in the press and is known more for his nuts-and-bolts organizational savvy than any technological vision. A 13-year Apple veteran, Spindler has risen to the top because of his skill at reining in costs and at raising productivity.

NO TIME FOR CHITCHAT. The company's new CEO proved his mettle in Europe, where he ran Apple's operations for a decade, and then in Cupertino, Calif., where he has been chief operating officer since 1990. In his new position, he's unlikely to spend much time chitchatting with the glitterati. "I don't believe in this star-mania stuff," Spindler said a few years ago in Paris. "I'm too much of a believer in teams to worry about becoming a star."

Spindler's trademark attention to detail, however, is just what Apple's board thinks the company needs these days "He understands manufacturing, he's brilliant and hardworking, and he has less of a commitment to having a public persona," says board member Bernard Goldstein, an investment banker. Insiders say that for the past three years, while Sculley was racking up frequent-flier miles, Spindler has been running Apple—in fact if not in name. Spindler, for example, is the one who compressed Apple's product-development cycles from a too-costly 18 to 24 months three years ago to just 9 months today. "I think Mike Spindler is the unsung hero of Apple's success over the last two years," says Jobs.

Spindler developed his management skills at a series of European headquarters. Armed with a degree in electrical engineering, he started his career at Siemens. The post was a dream job for German engineering grads, but he found life there too staid. "I figured there was more to life than being an engineer," he once explained. So he moved through European sales and marketing jobs at Schlumberger, Intel, and Digital Equipment.

Spindler joined Apple in 1980 as marketing manager for European Operations, when it was little more than a tiny office. A workaholic, he helped build Apple into a European powerhouse—its market share there is 8.1%—and he was president of Europe-an Operations from 1987 to 1990. Th gives Spindler, who speaks French a Italian as well as German and Englis one obvious edge over Sculley. "He h a real global perspective on the indu try," says an executive at an App joint-venture partner. "He obvious has a lot more feel for what's happe ing outside the U. S. marketplace th Sculley."

WORK VS. WORKOUT. Spindler h hung on to his European reserve ev in the laid-back California environme But Apple employees nonethele praise him for bei warm and approac able. David Burnha a quality engineer f new products at A ple, says Spindler d plays greater rappo with employees th Sculley did. "N many people on r level see or deal wi Sculley," Burnha says, while Spindl enjoys roaming t halls and saying he to Apple worker And he has made his affair to know e eryone else's bu ness. "Spindler is o of the few guys who understands t business top to bottom," says Bru Gee, product manager for Apple PowerPC project.

Outside the office, Spindler spen his time quietly with his French wi and their three children. Any hobbie PR man Regis McKenna, a close frien says Spindler has but one passio work. McKenna says friends ha pressured Spindler to exercise mo and the CEO has installed exerci equipment in his home. Given t heavy responsibility that Spindler shouldering now, it's not likely to g used much any time soon.

By Catherine Arnst in New York, wi bureau reports

UNLIKE STEVE JOBS AND JOHN SCULLEY, NEW CEO SPINDLER IS KNOWN MORE FOR COST-CUTTING AND THE ABILITY TO RAISE PRODUCTIVITY THAN FOR TECHNOLOGICAL VISION OR MEDIA SAVVY

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cense out Apple's crown jewel, its Mac operating software, to other companies. Insiders observe that Spindler has long advocated the notion that Apple is more of a software company than a hardware company.

Meanwhile, though, Spindler must fix Apple's core Macintosh business. For years, Mac's innovative—and proprietary—software allowed Apple to command premium prices. But the growing popularity of Microsoft's Windows software gives other PCs a Maclike look. Apple responded in October, 1990, by bringing out a family of bargain-basement computers, the Classic and Macintosh LC models. In October, 1991, it followed with the PowerBook, a laptop that took off like lightning, becoming a $1 billion hit. That further fueled growth. International Data Corp. says Apple's worldwide unit sales jumped 40% in 1991 and an additional 18%, to 2.8 million, in 1992.

MR. OUTSIDE. Now, Spindler hopes to take the nine-year-old Mac technology a quantum leap forward. In early August, Apple hopes to up the ante with new Macs code-named Tempest and Cyclone. These machines will be the first Macs to recognize speech. Also in the works: a test pilot to see if customers want fashion Macs, such as Classic models with color casings. Says Forsyth: "We have to make sure Apple doesn't get hardening of the arteries."

But the big move will come later. Apple plans to shift the whole Mac line to a new, blazingly fast processor chip, called PowerPC—offspring of the Apple, IBM, and Motorola alliance announced two years ago. It is based on a technology called reduced instruction-set computing, or RISC, that IBM already is using in its workstations. Apple's hope: It will increase Mac's speed by two to eight times. Trouble is, models using the chip won't be out until next year, and the entire line won't be switched over for two years. And though Apple predicts it will sell 1 million PowerPC-based Macs in 1994, even James S. Gable, Apple's PowerPC product manager, admits that "there's no way this [transition] is going to be smooth as glass."

The big questions now: Just how involved is Sculley going to be? And does the nuts-and-bolts Spindler have the far-sighted technical vision Apple needs? "Michael has a deeper experience in the computer business itself," says John A. Rollwagen, a former Apple director and ex-CEO of Cray Research Inc. "He can get down and dirty. But he doesn't have the breadth of experience John d particularly in the consumer market

As Apple's resident visionary and Outside, Sculley has played the key of setting strategy and working on ances. For instance, at least onc month he jets from Cupertino to Ja to plant the seeds for relationships. S ley says he will still play that role that Spindler is CEO. But Sculley cle is spending more time on outside in ests—including his highly publicized with the Clinton Administration. Cell phone baron Craig McCaw theorizes Sculley is sin burned out fr his habitual 16- 18-hour workda "He's driven him into the groun McCaw says.

For now, Scu is planning to tak six-week sum sabbatical—a br that all Apple ployees get ev five years. Edw R. McCracken, and president of con Graphics Inc workstation mal predicts that Scu will leave Ap within the next years to pur some other intere

Still, Sculley sists that for foreseeable fut he will be help Spindler out. "I not leaving Appl am committed to ple." Compaq Eckhard Pfeif who replaced fou er Rod Canion years ago, questi whether that work. "When the vision on one clashes with the business reality on other, it may not be as harmonic a needs to be." Indeed, Spindler fa daunting challenges on multiple front creating products for the new dig world order while wringing profits fr the PC business. "It is a huge agend Spindler concedes, "but not undoabl we focus." Now, Spindler is the one must provide the focus. And there be little question that the pressures that challenge will soon enough be e ing fatigue in his face, just as they o did on Sculley's.

By Kathy Rebello in Cupertino, Calif., Russell Mitchell in San Francisco, Eva Schwartz in New York, and bureau rep

DIERY

FORSYTH

NAGEL

GRAZIANO

SPINDLER'S TOP TIER

Here are the key executives Spindler will be counting on to help steer the company into its new era:

GASTON BASTIAENS 46, a vice-president and Philips vet. He's a tough cookie charged with making sure new products get out on time.

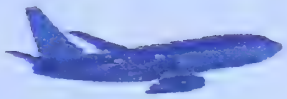
IAN DIERY 43, executive vice-president for worldwide sales and marketing. This folksy, easy-going Aussie is under the gun to increase Macintosh sales.

G. FRED FORSYTH 49, a demanding senior vice-president and ex-Digital Equipment exec. Forsyth is adding discipline to the free-spirited Macintosh product-development process.

JOSEPH A. GRAZIANO 49, CFO. A get-the-job done executive, Graziano must pare Apple's costs.

DAVID C. NAGEL 48, a senior vice-president and Apple "big thinker." As chief of Apple's advanced technology lab, Nagel may provide a big assist to Sculley in his role as "visionary."

MORRIS TARADALSKY 45, a customer-oriented vice-president. He is leading Apple's efforts in developing sophisticated computer networking products and high-end PCs.



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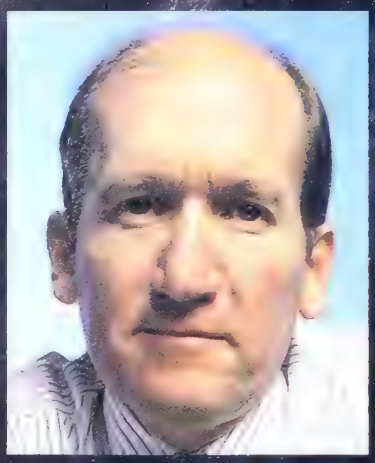

"...It was clear we knew the same thing: that for this to be happening defied logic"

CRAIG WEATHERUP
CEO, Pepsi-Cola North America

"We both had the mutual goal of getting to the bottom of this and finding out the truth"

DAVID KESSLER
Commissioner FDA

THE RIGHT MOVES, BABY

How Pepsi squelched the syringe scare—with the aid of the FDA

Craig E. Weatherup remembers the moment well. It was the evening of June 14, and "I was in my backyard trying to help my wife clean up some hedge trimmings," says the chief executive of Pepsi-Cola North America. "I got a call from the commissioner of the FDA. I'd never met David Kessler or talked to him, but it was clear we knew the same thing: that for this to be happening defied logic."

So began an intriguing, crucial partnership between government and industry. The weekend before, newspapers in Seattle and New Orleans had carried reports of people who claimed they had found syringes in Pepsi cans. By June 23, more than 50 people would come forward with similar stories. No matter that logic was lacking: The reports had taken on a panicky tone. In the end, though, real panic never set in—partly because the consumer reports were mostly fraudulent. But it's due also to the effective linkup between Pepsi-Cola and the Food & Drug Administration.

By the time Weatherup and Kessler spoke, one important decision already had been made. That morning, Kessler had chosen not to stage a recall of Pepsi, despite growing pressure for such a move. "My considerations were solely from a public-health standpoint," he says. His logic: Consumers would be safe as long as they got the message to pour soda into a glass before drinking.

HELL WEEK. But that action didn't do much to ease public concern. By the following morning, June 15, says Weatherup, "the networks were calling to see if we wanted to say anything." They did. Weatherup had his staff prepare video footage demonstrating the canning process at Pepsi, showing how it is virtually impossible to insert a syringe into the cans. "We sent that footage up by satellite by 3 o'clock on Tuesday," says Weatherup. By that time, there were so many satellite trucks and helicopters filled with television crews landing at IBM's helicopter pad, just up the road from Pepsi-Cola headquarters, that it "looked like a moon landing."

Then, another question: Was Weatherup the right person to present Pepsi's case to the masses? straightforward, no-nonsense ty Weatherup is not as avuncular as boss, PepsiCo Inc. Chairman D. Wa Calloway. But Pepsi executives deci Weatherup was more comfortable w the intricacies of canning operatio And in six personal appearances morning and evening news shows, *MacNeil/Lehrer Newshour*, and *La King Live*, the executive's earnestn played well. He quietly explained ho syringe couldn't possibly find its w into a can.

Then, on the night of June 15, Wea erup and Kessler appeared on *Nightl* together. By that time, Kessler knew agency had at least one arrest in works: A Pennsylvania man, it tur out, had made up a story about Pe tampering. Ted Koppel peppered b men with questi about product saf and the penalties making false claims product tampering years in prison an $250,000 fine) a helped dispel the tion that Pepsi c were contaminated.

The united fr was a compelling age for consume who otherwise mi not have believed consumer produ company executi Says Tom Pirko, consultant for the b erage industry w does some work Pepsi: "There w no question t [Kessler] was t dominant influence

SPOKESMODEL CRAWFORD CALLED TO OFFER HER HELP DURING THE CRISIS

s of the public believing [Pepsi] and erizing the whole thing."

Thursday, June 17, the Federal Bu- of Investigation had arrested four le for making false claims about ering with a product. After long ssions on June 16 and June 17, ler and top-ranking FDA officials imously decided that they had no ence of nationwide tampering. e that decision was made," says ler, "we decided to go public with statement."

Pepsi-Cola, there still was plenty of l-wringing. Weatherup worked a g of 20-hour-plus days, speaking to way several times a day and calling every night at home. Pepsi employ- faxed updates to anxious bottlers daily. And two dozen employees e phones, taking calls from worried umers and bottlers, as well as vari- celebrities and supermarket chain calling to offer support.

OM. Dr. Joyce Brothers called in. lid supermodel and Pepsi spokes- an Cindy Crawford. "Cindy called backstage at *David Letterman* to what she could do to be helpful," Weatherup. Home Box Office co- an Paul Rodriguez, another pitch- offered to help out at no charge. mother called, of course," says therup.

me bottlers tried to calm local jit- themselves. "Hell, we opened our up to everybody," says James C. Jr., chairman of Buffalo Rock Co. in ingham, Ala. "The TV stations came and we showed 'em we got 28 peo- doing quality control 'round the ."

l the attention brought a lot of free city—normally, not a bad thing for la company at the start of a long, summer. There was a dark side to exposure, of course: Pepsi execu- had to reassure consumers that wasn't another Tylenol or Perrier . But since there had been no inju- deaths, or poisonings, Weatherup a recall would have been "dishon- —and very expensive.

w, the crisis has quieted. The FBI made 20 arrests, and Kessler's FDA sking in its success at pursuing an ctive investigation under intense ic scrutiny. Pepsi continues to re- re the public. Starting on June 21, ompany ran full-page ads in 12 na- l papers, and bottlers ran ads in 300 00 local dailies telling readers that stories about Pepsi were a hoax. s was a very isolated, freaky kind of ," says Pirko. "But Pepsi gained by Now Weatherup can ease up. "Don't anyone," he says."But I'm planning ke a day off."

Laura Zinn in New York, with Mary Regan in Washington D. C.

A BIG THANKS-BUT-NO-THANKS TO RJR NABISCO

Doubts on the Street lead to the scuttling of a $1.7 billion stock offer

Oh, never mind. Basically, that's what RJR Nabisco Holdings Corp. seemed to say on June 23 when it pulled the plug on its long-planned $1.7 billion offering of stock tied to its food business. "This would have been a 'nice-to-do' transaction, but it wasn't a 'need-to-do' transaction," says an RJR spokesman. "It's not like we're so aggressively leveraged as we were a few years ago."

That's true. But that doesn't mean RJR's troubles are over or that it isn't disappointed by its decision to pull the offering. Top executives at Kohlberg Kravis Roberts & Co., which owns 49% of RJR's stock, had been working on the offering since December. Their plan: split off Nabisco Foods Group from R. J. Reynolds Tobacco Co. in hopes of boosting the flagging fortunes of the holding company, which has seen its stock price fall 36% since January. R. J. Reynolds' earnings have been hurt by a brutal cigarette price war since early April and uncertainty over tobacco liability.

RJR hoped to get $17 to $19 a share. No more than $14 to $15 looked probable

But investors weren't buying it—at least not at KKR's price. Instead of the $17 to $19 range KKR and RJR were shooting for, the offering wasn't expected to fetch more than $14 or $15 a share. That price would have been only 12.5 times estimated 1993 earnings of $1.20, just barely ahead of the 12 times earnings that the entire company trades at now, says Standard & Poor's Corp. analyst Robert Natale.

What snuffed out demand? A lot. The complicated spin-off of Nabisco stock was rife with red flags for some investors because it wasn't going to be an independent company. "The main problem I had with this deal was that you weren't buying true ownership in the company," gripes Arthur Cecil, a T. Rowe Price analyst. "You weren't going to be able to call up management and say, 'Hey, let's do it this way!' because they'd still be working for the people who ran the tobacco company."

BIG CHARGE. Another problem: The KKR executives who devised the deal had lumped the lion's share of costs related to their 1989 acquisition of the food/tobacco giant onto the balance sheet of the tobacco business. RJR Nabisco must take an annual noncash charge of roughly $600 million to amortize the goodwill created when KKR bought the company for $21.7 billion more than its book value. That premium must be amortized over 40 years to satisfy accounting rules.

Had the offering gone through, Nabisco's goodwill amortization expense would have been $206 million—roughly half the $404 million charge carried by the tobacco business. The result: "Nabisco Foods' earnings were overstated," says Cecil. Adds another analyst: "There were a lot of shenanigans involved with this deal."

In the days leading up to June 24, when the stock was to begin trading, demand for it at the planned offering price was tepid. On the morning of June 23, new RJR Nabisco Chief Executive Charles "Mike" Harper and KKR partners Henry R. Kravis and George R. Roberts decided to scuttle the deal. KKR and RJR "concluded that Nabisco was too good a company to sell at [$14-$15]," says a source close to the deal. Meanwhile, a lot of people wish that KKR had never bothered at all. "I'd love to see their bills from lawyers and investment bankers from this aborted deal," says Ellen G. Baras, a fixed-income analyst at Duff & Phelps/MCM Investment Research Co. "They could have promoted a lot of cigarettes with that money."

By Elizabeth Lesly and Laura Zinn in New York

ANDY FEFFERMAN

TRADE

DID COMMERCE PULL THE PLUG ON FLAT-SCREEN MAKERS?

The industry is incensed about the Administration's trade turnabout

If there's anything that qualifies as a critical technology for the Information Age, it's flat-panel displays. From laptop computers to wall-size television screens, their growth prospects are explosive. The industry is expected to triple worldwide sales, to $9.4 billion, over the next six years. Yet Japanese electronics giants hold an overwhelming lead over the tiny U. S. industry.

So when Bill Clinton and his technowonks took office in January, the issue wasn't whether to give the fledgling U. S. flat-panel industry a vital boost, but rather how much and how fast. White House Council of Economic Advisers Chair Laura D'Andrea Tyson met with industry officials last February to map a comprehensive strategy. And on Apr. 30, the Pentagon's Advanced Research Projects Agency (ARPA) gave Troy (Mich.)-based Optical Imaging Systems Inc. (OIS) a government grant of up to $50 million to help build the nation's first large U. S.-owned factory for advanced flat-panel screens.

But this model of Clinton-style industrial policy has taken a jarring turn—one that raises questions about the Clintonites' ability to fashion a coherent strategy from their promises. On June 21, the Commerce Dept. dropped a bombshell that has flat-screen business boosters both baffled and fuming. Commerce revoked its 62% antidumping duties on imports of active-matrix displays, the most advanced and expensive form of flat panels. The decision is great news for Japanese companies, which already hold 95% of the market.

VACUUM POLICY. The official reason for the Commerce ruling is simple enough: OIS, which originally brought the dumping charges, withdrew its complaint last November. "Policy had nothing to do with it," says a Commerce official involved in the decision.

That's exactly what worries flat-panel makers. They see a crucial decision made in a vacuum—partly because Commerce Secretary Ronald H. Brown hasn't named a senior official to head trade policy. "This was done with no clear policy direction," says Charles P. Hoke, president of Standish Industries Inc., a maker of liquid-crystal displays in Lake Mills, Wis. "Somebody's going to have to take responsibility if we are going to get a comprehensive approach." Even a senior Administration official expressed surprise at the timing of the Commerce action: "We need to think about what all the agencies are doing at the same time as we are taking this away."

Critics of the decision suspect that politically wired business interests may have played a role. The Administration is siding with U. S. buyers of flat-panel displays such as IBM, Apple Computer, and Compaq Computer, which don't want to nurture an American industry if it means paying duties on Japanese-made components.

The computer industry also argues that duties are keeping jobs out of the U. S. by forcing them to manufacture notebooks in Japan. LCDs imported as part of assembled computers enter the country duty-free. The result: decisions from companies such as NEC Technologies Inc., which was gearing up to make notebooks in Massachusetts bu oped to keep production overseas. Bu the industry has accelerated the drain b sourcing laptops and assembling ove seas instead of investing in domest production.

The Commerce action sits well wit OIS. "The duties serve no purpose fo OIS," says Rex Tapp, the company chief executive. "With the duties place, we couldn't establish long-rang relationships with [computer] custor ers," who had moved manufacturin overseas.

SIGNS OF HOPE. U. S. flat-panel-displa makers worry that the Administratio may be more willing to subsidize han picked companies such as OIS than t create a nurturing atmosphere for enti industries through a combination o trade, antitrust, and export promotio policy. "As an entrepeneur, I'm a litt uncomfortable wit this," say James M. Hurd, chief executive of fla panel maker Planar Systems Inc. an head of the Advanced Display Manufa turers of America.

The industry has not given up on th Administration. Executives see a hopef sign in a policy study by the Whit House National Economic Council ex pected in August. And over the next tw years, ARPA, which the Administratio expects to promote high-tech compet tiveness, plans to invest $200 million t develop the flat-panel-display industr on top of $250 million already spent. Bu after the Commerce decision, some U. S flat-panel-display makers fear that wit out a clear-cut U. S. strategy, even tha largess will amount to nothing mor than shooting in the dark.

By Douglas Harbrecht, with Pa Magnusson in Washington and Ga McWilliams in Boston

'THIS ISN'T BEING HANDLED WELL'

On June 21, the Commerce Dept. quietly dropped antidumping duties on imports of flat-panel-display screens—allowing the Japanese, who control 95% of the U.S. market, to cut prices. U.S. screenmakers charge that Commerce has no clear strategy for nurturing the critical technology.

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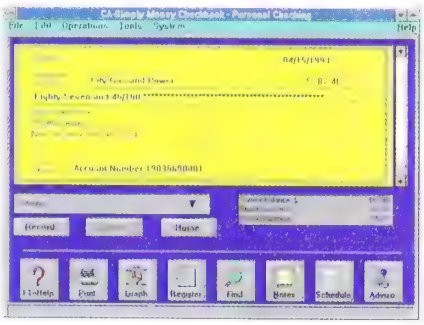

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ENERGY

FILLING UP IN DALLAS: DRIVERS MAY PAY A FEW PENNIES LESS PER GALLON THIS SUMMER

NOW, A GAS TAX SEEMS LIKE A DROP IN THE BUCKET

Oversupply and lackluster demand are keeping prices down at the pump

If Bill Clinton had to pick a year to pass a gasoline tax, this is shaping up as a fine one. Lawmakers are likely to settle on a 6¢-a-gallon tax hike starting this fall, on top of a rise in producer costs caused by tougher environmental regulations. But brimful inventories and lackluster worldwide demand are pushing prices downward—and should muffle any tax-induced gasoline-price spike.

Pump prices are already unusually low. And they may drop a few pennies per gallon more this summer, rather than rising by a nickel or so as they usually do. "I haven't seen the typical school-is-out runup this year," says Barry Miller, owner of Miller's Exxon in Irving, Tex. Indeed, the national average for regular unleaded self-serve as of June 11 was $1.12 per gallon, compared with $1.16 a year ago. "It's a trend that could be reversed, but it appears to be gaining momentum," says Trilby Lundberg, publisher of *The Lundberg Letter*, which polls 10,000 service stations.

OVERSUPPLY. The downward pressure on prices grew following OPEC's divisive June meeting. After Kuwait raised fears of a production free-for-all by refusing to honor its third-quarter quotas, futures traders shaved more than $1 off crude prices, to less than $18.60 per barrel. Prices have since stabilized, as OPEC-watchers expect Saudi Arabia to intervene if Kuwait and quota busters such as Iran and Nigeria dump enough crude to tank prices. "If West Texas crude goes below $18 a barrel, the Saudis will cut production," says Standard & Poor's oil analyst Edward Graves.

Refiners also face tough fundamentals. Margins, already the lowest since 1988, continue to slip. And stocks of gasoline stand at 225 million bbl., vs. 220 million in a bloated 1992. "The last time inventories were this high relative to demand was 1987," says Ken Miller, an analyst at Purvin & Gertz in Houston.

The longer-term trend is for plentiful supplies, too. OPEC wants to boost its capacity from 26.6 million bbl. of crude a day to 33 million bbl. by 1995—a plan Kidder, Peabody & Co. analyst Bernard J. Picchi calls "outlandish," given worldwide recession and increased production by non-OPEC nations. To raise hard cash, the Russians lifted exports some 30% over last year. Meanwhile, the Iraqis are trying to persuade the U. N. to ease the embargo against its oil exports.

Refining overcapacity is another industry headache. Chevron, Shell Oil, Amoco, and others have shut refineries, taking some 500,000 bbl. a day out of commissi since 1991. But upgrading remaining cilities has added a net of 350,000 bbl. day of capacity, says Purvin & Gert Miller. At current sluggish demand le els, "that's about five years' worth growth," he says. While the Ener Dept. expects U. S. consumption to pi up later this year, gasoline and motor- sales dropped 6.1% between the four quarter of 1989 and the first quarter 1993. And recession in Europe and Jap will keep the world market soft.

GREEN FEES. With all these competiti pressures, why haven't gasoline pric fallen even more? The answer in lar part: environmental regulation. T Clean Air Act of 1990 forced oil comp nies to invest in a variety of programs from gasoline additives called oxyge ates that cut carbon monoxide emissio in winter to reformulated gasoli blends that reduce evaporation in t summer months.

Because the regulations depend on cal pollution levels and regional weath patterns, there's a jumble of price creases as companies try to pass t costs on to customers. Jerrold L. Levi Amoco's director of corporate studie says the company bumped up prices 2¢ a gallon over the past three years pay for programs to increase the vap pressure of fuels. Last year, consume forked over an extra 3¢ to 5¢ a gallon pay for the introduction of oxygenate

That's not the end of the hikes. 1995, Amoco plans to lift local prices to 8¢ per gallon for reformulated gas lines required to cut emissions in are with severe ozone problems. In 1996, L vine says, Californians should begin pa ing 15¢ to 20¢ more a gallon at Amo stations for special fuels required f the federally mandated Low Emissi Vehicle program. Still, Big Oil may n be able to pass on all these environme tal costs to consumers. "I'm afraid the companies are going to have to eat substantial portion of the costs," sa economist Philip K. Verleger Jr. Charles River Ass ciates Inc.

Tax hikes are anot er matter. Taxes a counted for 28% gasoline's retail pri last year, up from 22 in 1990, says Lun berg. But with pric as soft as they a American motoris may hardly noti when Washingt comes back for mor

By Peter Burrows Dallas, with Jo Rossant in Rome

TARNISHED BLACK GOLD

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HOLLYWOOD

FOR HOLLYWOOD, THESE ARE TRULY THE DOG DAYS

The summer's stinkers plus shrinking audiences mean bad box office

Stunts like this used to work so well in Hollywood. Columbia Pictures laid out $500,000 in March for a rocket to carry a film promo into orbit—the first advertising in space. But there were technical glitches, and the ship hasn't made it off the ground. And the studio's would-be blockbuster, *Last Action Hero*, isn't exactly soaring.

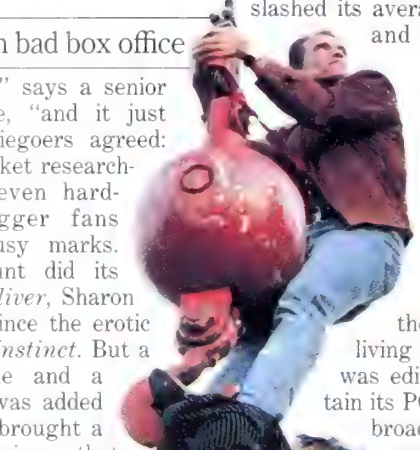
It's time for Hollywood's summer flameout. *Last Action Hero* generated a disappointing $15 million in box-office sales in its first weekend, June 18-20. And with studios rushing to litter America's theaters with a crushing 60 films before the kids head back to school, studio executives are bracing for many more flops where that came from.

TEEN TURNOFFS. A superhyped *Jurassic Park*, with box-office revenue of $120 million through June 20, is luring moviegoers who might otherwise have stayed home. That has pushed ticket sales so far this summer up 5% from last year, according to industry followers Exhibitor Relations Co. But Steven Spielberg's dinosaur-packed extravaganza is one of the industry's few real hits: Six weeks into the season, the list of disappointments is already hefty (table). A strong advertising campaign by Walt Disney Co. launched *Super Mario Bros.* to an $8 million opening weekend, but its dark and confused plot soon turned teens toward action films such as *Cliffhanger*. The lack of a strong teen following also doomed *Hot Shots! Part Deux*, which quickly fell from sight after a strong first week.

What went wrong on the way to the cash register? The easy answer—and the one studio executives are quick to offer when turnstiles aren't clicking—is that the flicks are stinkers. With an overabundance of choices, moviegoers simply queue up to the next window if word of mouth is bad. "The audience won't go to see a bad film no matter what we do," says Barry L. London, Paramount Pictures Corp.'s president of worldwide distribution.

Columbia executives were confident that with Arnold Schwarzenegger atop the bill, *Last Action Hero* would easily gross at least $100 million. "Then we got a look at the film," says a senior Columbia executive, "and it just didn't work." Moviegoers agreed: In a survey by market researcher CinemaScore, even hardcore Schwarzenegger fans gave the film lousy marks. Likewise, Paramount did its best to pump up *Sliver*, Sharon Stone's first film since the erotic blockbuster *Basic Instinct*. But a muddled story line and a weak ending that was added at the last minute brought a torrent of bad reviews that quickly killed interest.

But there could be more to blame for Hollywood's hard times than a few bad pictures. An increasing number of executives also worry that their audiences are leaving for good. The number of movie tickets sold has declined for three straight years and in six of the last eight. So far this year, moviegoers have spent $1.9 billion, according to the trade paper *Daily Variety*. That's 2% less than in 1991, despite price hikes of nearly 5% over the same period.



***LAST ACTION HERO*: "IT JUST DIDN'T WORK"**

NOTHING'S MOVING BUT THE DINOSAURS

	Projected Gross Before Release	Current Projected Gross
JURASSIC PARK (Universal)	$150 million	$245 million
LAST ACTION HERO (Columbia)	$100 million	$44 million
SLIVER (Paramount)	$75 million	$38 million
SUPER MARIO BROTHERS (Disney)	$40 million	$22 million
HOT SHOTS, PART DEUX (Fox)	$50 million	$38 million

DATA: EXHIBITOR RELATIONS, S.G. WARBURG & CO., BUSINESS WEEK

The industry is suffering from the shrinking population of 13-to-25-year-olds, who traditionally see as many as 12 films a year. As that group has aged, their movie trips have dropped to an average of four a year, industry experts say, as more and more would rather stay home with the kids or find ot entertainment.

That has brought on some unacc tomed soul-searching. "We have to r ize that we're not the only game town," says Universal Pictures Ch man Thomas Pollack. Universal slashed its average film budget by 2 and focused more on films such as *Cop a Half* that are air at young parents a their children. W other PG movies s as *Dennis the Mene Sleepless in Seat* and *Free Willy*, Ho wood aims to lure couch potatoes a their broods out of th living rooms. *Jurassic P* was edited specifically to ma tain its PG-13 rating to encour broader appeal, Universal ecutives say.

MINGLE NIGHTS. To dr crowds, some theaters gearing up new promotic Free mints await customers Loews Theaters' 181 locatic while AMC Entertainment I theaters bring in singles with f hors d'oeuvres, soda, and popcorn one-hour Mingle Nights before sc evening shows nationwide. "We wan to offer an alternative," says Rich Westerling, vice-president for mark ing. In fact, attendance at AMC's 246 t aters is slightly ahead of last year.

The rest of the summer is anyor guess. Reviews of Warner Broth Inc.'s *Dennis the Menace* have b mixed. Paramount's *The Firm* is con ered a contender, riding on the heels the best-selling novel and Tom Cruis star power. *Sleepless in Seattle*, fr Sony's Tri-Star Pictures u has tested well, as has C Eastwood's action film *In Line of Fire* from Columb But rumors of reediting o Fox's *Rising Sun*, based Michael Crichton's other be selling novel.

It's true, as Tom Sher executive vice-president Twentieth Century Fox F Corp., puts it, that "rum can kill an otherwise great movie." still believes *Rising Sun* will outlast gossip. But even a decent flick can killed by inflated expectations. May the real lesson for Hollywood is th Concentrate more on making bet movies and less on hype, and people w come. Are you paying attention, Arno

By Ronald Grover, with Becky Johnson, in Los Angeles

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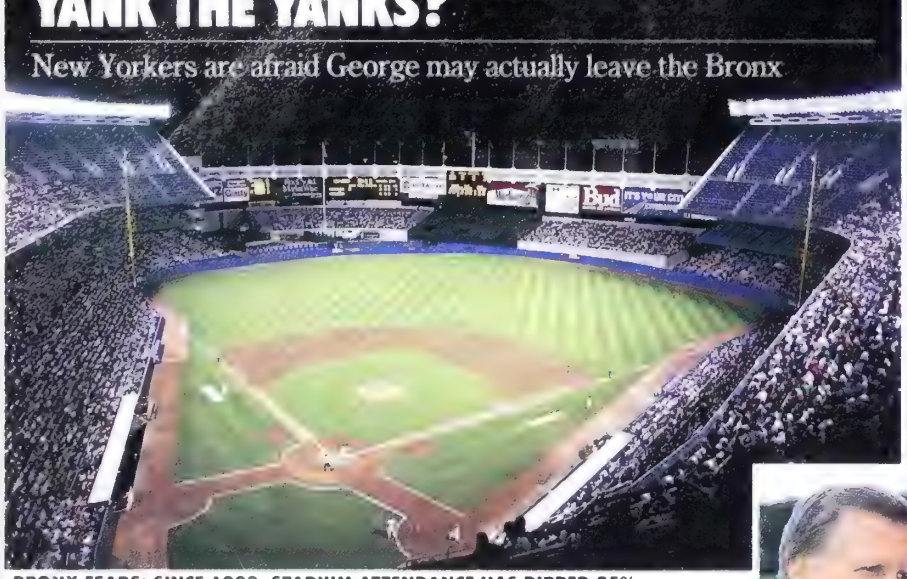
BASEBALL

WOULD STEINBRENNER REALLY YANK THE YANKS?

New Yorkers are afraid George may actually leave the Bronx



BRONX FEARS: SINCE 1988, STADIUM ATTENDANCE HAS DIPPED 35%

This time, George M. Steinbrenner III really means it: Either New York City builds him a new stadium (or rebuilds the Bronx), or his New York Yankees are bolting faster than a line drive up the middle. Not to panic anyone, but he's eyeing . . . New Jersey.

New York mayors and governors—not to mention some 8 million other city dwellers—have heard this line before. Now, though, they're taking the Yankees' tempestuous majority owner very seriously. On June 17, Governor Mario M. Cuomo appeared on a Manhattan heliport to fret publicly over the "real danger that New York might lose the Yankees," and raised the possibility of a $1 billion state bond to finance a new baseball stadium, outside the Bronx, that would keep the Bombers happy.

Even King George's opponents concede that Steinbrenner's complaints have merit. The 56,000-seat Yankee Stadium, one of America's grandest sports arenas, was refurbished by the city in 1976. But it still lacks adequate parking, and its South Bronx location unnerves suburban fans. "You can live on tradition only so long," Steinbrenner says. Fans now "would rather have a clean, new ballpark with plenty of parking." Since 1988, attendance has slipped 35% (chart), to 1.7 million. True, ticket prices have jumped 45% in the same time, and the Yanks haven't exactly burned up the league. But this year, despite solid play on the field, the boys in pinstripes still are drawing fewer fans than their pitiable Queens-based counterparts, the New York Mets, owners of baseball's worst record. After enjoying sellouts on the road, Steinbrenner says, "we come home and draw 18,000 to 20,000."

The Boss says he would like the team to play in Manhattan. But he may also have talked to officials across the Hudson River in New Jersey, which has long advertised its availability for a baseball franchise. Vincent Tese, New York State's director of economic development, says New Jersey guarantees the Yankees attendance of 2.5 million, the equivalent of $6.5 million in new revenue.

Neither Steinbrenner nor New Jersey officials will confirm such discussions, though Robert E. Mulcahy III, director of the New Jersey Sports & Exposition Authority, does say "there's absolutely no question in my mind that baseball [attendance] would average 3 million a year in New Jersey, and I have no problem writing that into a contract." For a big-league team, the state says it would finance construction of a stadium within 10 miles of the sprawling Meadowlands complex, already home to the footb Giants and Jets, and the basketb Nets—all former New York denizens

Would the Boss really move his te to Jersey? "I don't know, but I'd rat not take the chance," says Roberto mirez, a state assembly representat from the Bronx. The costs of such desertion would be enormous—and only to New York's pride. "If the Y kees move, you can forget about Bronx," says the owner of a small b ery sitting in the stadium's shadow.

WEST SIDE PITCH? Facing a tough ree tion battle this November, New Y City Mayor David N. Dinkins is desp ate to keep the Yankees where they a if only to please the Bronx's 1.2 mill residents. Indeed, Steinbrenner's c burst coincided with the release of a port by the Bronx Center Steering Co mittee that recommends redevelopm of commerce, housing, and transpo tion in the South Bronx—a project t largely depends on Yankees remaining.

Meanwhile, thou Cuomo is considering new Yankee stadium possibly on state land Manhattan's West Side that would cost at le $300 million. Officials s he's also considering Mets plan that calls construction of a dom stadium, an enterta ment center, and a station. The state's pot tial bill: $1 billion.

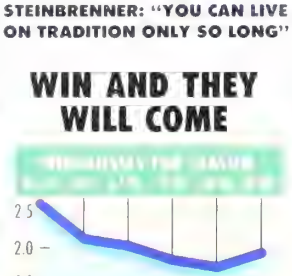
In fact, the one w the least on the line m well be Steinbrenn Sure, attendance is we and an extra 10,000 fa a game could boost an al revenue by $8 milli But gate revenues do mean so much next to $57 million his team g every year from local and radio deals and share of league royalti "With their current ca contract, they can aff to play baseball in a s dio," says Bronx B ough President Fernando Ferrer.

Ferrer says all Steinbrenner rea wants is a ring of new luxury box se around the existing stadium, plus so parking spots and "atmospherics." T relatively modest face-lift would c $150 million. Most likely, someone sides Steinbrenner and the Yankees w be happy to pay for it.

By Keith H. Hammonds in New Yo with David Greising in Chicago

STEINBRENNER: "YOU CAN LIVE ON TRADITION ONLY SO LONG"

WIN AND THEY WILL COME



DATA NEW YORK YANKEES

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In Business This Week

EDITED BY JULIE TILSNER

HE'S NO FDR

But it's not a bad start, market-wise, for President Clinton. Despite some policy misfires, his Administration hasn't spooked Wall Street much. Here's how the monthly average change in the Standard & Poor's 500 stock index during Clinton's first four months compares to other Presidential honeymoons.

FDR	18.25%
Bush	2.22
Hoover	2.21
Kennedy	2.19
Reagan	1.07
Clinton	0.92
Nixon	0.42
Carter	−1.02
Eisenhower	−1.20

DATA: PRUDENTIAL DIVERSIFIED INVESTMENT STRATEGIES

AN IMPORT MICHIGAN CAN LIVE WITH: JOBS

▸ General Motors CEO Jack Smith and United Auto Workers Vice-President Stephen Yokich were all smiles on June 21 when GM announced that by 1995, it will shift production of at least 70,000 Chevy Cavaliers annually from Mexico to Lansing, Mich. The move will create up to 1,000 jobs. But Smith and Yokich may not be smiling for long. GM still must find a way to shrink its bloated work force—an issue that will likely dominate the latest round of labor negotiations with the UAW.

A PUSH ON TARIFFS MAY COME TO SHOVE

▸ American steelmakers may have won a major victory against foreign producers, but will the cost be a nasty trade brawl? On June 22, the Commerce Dept. ruled that steel imports from 19 countries are being sold in the U.S. at unfair prices and that 12 countries unfairly subsidize their imports. The result: stiff new tariffs averaging more than 33%. They are set to go into effect in early August. A negotiated settlement is still possible between now and then, but the European Community and Japan reacted angrily to the move. The U.S. action could complicate efforts to reach trade breakthroughs at the Group of Seven summit in Tokyo beginning July 7.

SECONDHAND SMOKE'S SECOND HEARING?

▸ In the tobacco industry's dreams, antismoking lobbyists and the Environmental Protection Agency just go away. Why not dream a little? On June 22, six tobacco growers and marketers, including giants Philip Morris and R.J. Reynolds Tobacco, sued the EPA in federal court in North Carolina. The group wants the EPA to withdraw its classification of secondhand smoke as a Class A (that's as bad as it gets) carcinogen. The two companies argue that the agency used faulty scientific methods. Antismoking advocates view the legal salvo as an attempt by the industry to stave off smoking bans in public places. The EPA says it stands by its study.

MADONNA SHOULD BE NO PROBLEM

You could blow a bundle on a drop of Elvis Presley's personal sweat. Or, for just $10, you might someday buy a strand of The King's DNA. Biochemist Kary Mullis wants to market chromosomes of the rich and famous. His company, StarGene, based in San Rafael, Calif., is developing trading cards bearing holographic reproductions of celebs' DNA strands, alongside photos of the genetically exposed stars.

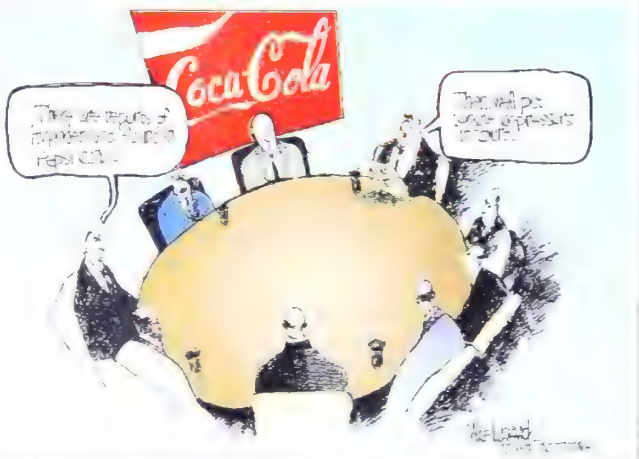
The problem: getting the goods. Mullis needs only a piece hair or bone to scrape enough cells to reproduce the DN strand. But the former Cetus biochemist says finding extar scraps of Elvis and other dead legends isn't easy, most because their legal handlers tend to be wary. Winning clonir rights from living stars also is problematic, though Mullis say Grateful Dead rocker Jerry Garcia may be interested. Jerr and his DNA were on the road and couldn't be reached.

LLOYD'S OF LONDON'S STICKY WICKET

▸ The venerable insurer Lloyd's of London added a higher-than-expected $4.3 billion 1990 annual loss to its long list of woes. (Lloyd's keeps its books open for three years.) Chairman David Rowland described the figure as the "low point in the Society's performance" over the past 305 years. Heavy claims from storms and the cost of legal battles contributed to the hit. Rowland predicted that Lloyd's will see a return to profitability in its 1993 operating year. Meanwhile, Lloyd's is trying to attract i first-ever capital from bot corporate and institutional i vestors, who, unlike Lloyd beleaguered "names"—inc viduals who pledge assets t support underwriting—wi have limited liability. Rov land says the firm has bee "beseiged" with interest. Bu Lloyd's latest numbers ma cool their ardor.

JAPANESE LARGESS TIMED FOR THE SUMMI

▸ The Japanese governmer will announce a five-yea $125 billion foreign-assi tance package on the eve c July's economic summit. U.S sources tell BUSINESS WEE that $50 billion of the mone will be in the form of expo credits, with the rest—$1 billion a year—going as d rect aid. The U.S., by con parison, provides $9 billion year in foreign aid. The eno mous package is Japan's wa of telling the world that it ready to be a global playe It also deflects some heat T kyo is taking from industria partners for running up $110 billion trade surplus But Japan's largesse will no extend to Russia. The Jap nese are miffed by Russia diplomatic slights.



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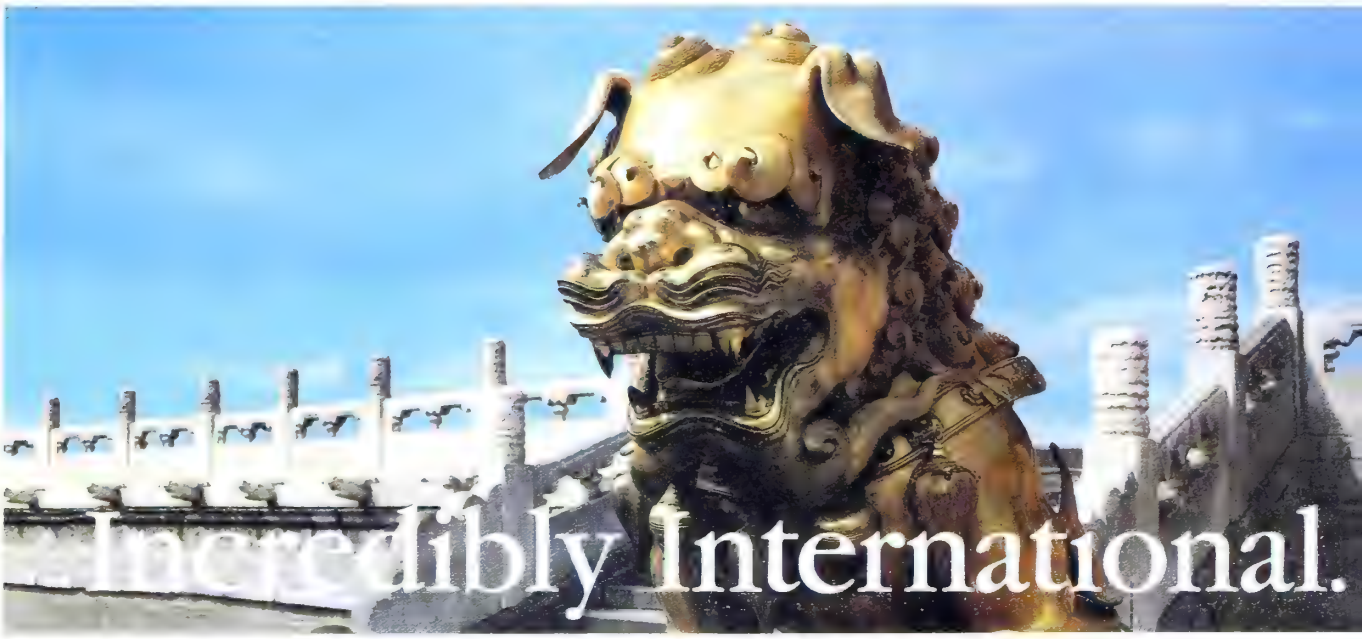

Statue in the Forbidden City, Beijing

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EDITED BY STEPHEN H. WILDSTROM

IEALTH REFORM: IOW THE GOP COULD BLOW ITS CHANCE

As the White House works away at its health-care reform plan, Democrats are getting nervous and Republicans are rubbing their hands in anticipation. The ? thinks that Bill Clinton's complex, regulation-heavy propo- will scare voters silly. By offering their own version, Reblicans hope to shuck a reputation as gridlocking obstrucnists they won during the budget fight. "There will be a sitive Republican alternative," vows GOP Chairman Haley rbour. "If the [Clinton] plan is as bad as we've heard, our alnative won't be swept under the rug."

But the GOP may be blowing its chance. Beset by deep ological divisions, Hill Republicans ? pursuing four approaches to alth-care reform—and their disdain each others' plans almost matches eir shared dislike of Clinton's. The sult: The party can't capitalize on ? long delays that have bedeviled ? Clinton plan, now expected in Sepnber. And even when the President veils his program, odds are the GOP sponse will be murky.

W MANDATES. The Republican alterives to Clinton range from "less of ? same" to "as little as possible." In ? Senate, a three-year-old study oup headed by Finance Committee member John H. Chafee R. I.) has nearly wrapped up work on a "managed competin" scheme. Like Clinton, Chafee would set up health-insunce-purchasing cooperatives that would give consumers a oice of plans. But the Chafee plan wouldn't force employers pay for coverage, require companies to join the cooperaes, or resort to price controls. Chafee, who has been trying build a moderate health-care coalition for years, figures that nservative Democrats will rally around his bill. "Health rem will be a bipartisan affair, or it won't happen," he says. Chafee's first problem may be corralling Republicans. Even sk-force moderates are holding his plan at arm's length. "Chafee speaks for the group only to the extent that he organizes the meetings," says an aide to a Chafee ally.

Chafee also faces intraparty competition from Senator Phil Gramm (R-Tex.), a Presidential aspirant. Under Gramm's plan, families would be expected to cover the first $3,000 in annual medical expenses with help from tax-deductible "medical IRAs." Mandatory insurance would pay for catastrophic illness. Price-conscious shoppers would drive down costs, Gramm argues, without the "collectivism" of the Clinton and Chafee plans. "If you change the incentives," he says, "consumers will decide how to reorganize the health system—not some planners over at the White House."

SENATOR CHAFEE'S PLAN HAS MANY RIVALS

"PRETTY SKIMPY." In the House, Republicans aren't sure that anyone should reorganize health care. Minority Leader Robert H. Michel of Illinois and Whip Newt Gingrich of Georgia have introduced a plan based on President Bush's modest 1992 reform effort. Leadership aides argue that this mix of insurance reforms, extra spending on clinics, and tax breaks for the self-employed could easily pass Congress—but they admit it falls far short of comprehensive reform. "If you lay our plan alongside Clinton's, it's going to look pretty skimpy," says a GOP staffer. Meanwhile, Representative George W. Gekas (R-Pa.), is pushing a plan that relies mainly on health education and state-by-state reforms.

Polls suggest that GOP minimalism may best reflect what the public wants. If Congress has a taste for major reform, Chafee's voluntary managed competition offers sweeping change with less disruption than Clinton's mandates. And the House leadership's bill could be everyone's second choice if more ambitious efforts bog down. But disunity may wreck the GOP's effort to escape their image as the party that just screams "No!" First, they have to learn to say "Yes" in unison.

By Mike McNamee

APITAL WRAPUP

ERKS

These are tough times for ex-politicians. Under pressure to trim their wn perks, members of Congress are racking down on retirees. The House as voted to stop paying for clerical taff both for former Speakers and reired Presidents after five years out f office. The Senate is expected to ake up the provisions in July. Meanvhile, former President Bush says he'll eturn $50,000 in office support to the Republican National Committee. The tipend, first disclosed by this magaine (BW—June 28), was supposed to over expenses incurred while promotng GOP causes. But as Party Chairman Haley Barbour now admits: "So far, he really hasn't done anything."

PUNISHMENT

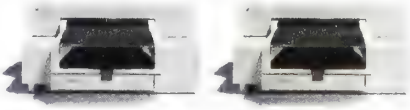
The conservative Washington Legal Foundation is riled about the punishment being handed out to some environmental criminals. Judges in Ohio and elsewhere have forced executives convicted of environmental offenses to join the Sierra Club as part of their sentences. The foundation, which thinks such forced memberships violate the First Amendment, filed an unsuccessful judicial-misconduct complaint against Ohio state Judge Thomas C. Nurre. Now, the group is looking for other ways to stop the practice.

IMPORTS

If the government hopes to trim the trade deficit with Japan, it might look in its backyard first. Although U. S. companies dominate the market for office-phone systems and personal computers, Japanese telephones and PCs grace some high-level Washington desks. The Federal Reserve Board and Social Security Administration have Fujitsu phone systems. And some top Treasury Dept. officials, including Assistant Secretary Alicia Munnell, use Toshiba PCs. The agencies say they comply with Buy America rules. "What can you do when [Japanese makers] come in with the lowest bid?" asks one official.

HP DeskWriter p

ers take color to the Macs.



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A

IOW, EVEN PEASANTS IATE BEIJING

ually the Party's bedrock, they're violently protesting taxes

hina's Communist Party has long relied on the country's huge peasant population as its base of pow- Mao Zedong took over in 1949 with overwhelming support of the peas- y. Deng Xiaoping was able to smash 1989 Tiananmen movement in part use peasants remained on the side- s. Now, the peasants are the s demonstrating, and Beijing is ng notice. "The central govern- t," says one Western diplomat eijing, "is terribly worried."

ith good reason. Growing rural erty is sparking angry protests ughout China. Peasants are be- hit by double-digit inflation and er taxes. To make matters se, cash-strapped local authori- are paying them with promis- notes. "Peasants are worse than they were one or two s ago," says William Hinton, American expert on Chinese ag- lture. "They are angry that 're getting poorer."

ow, Beijing is trying to ease financial crunch. On June 21, government abolished 37 taxes osed on the peasants. That's in tion to the 43 it removed earli- his year. Other recent moves ade threats to crack down on l officials who are pocketing taxes taken from farmers, and ges to funnel millions of dollars into overished rural areas.

DING VILLAGES. Beijing's decision to e taxes came two weeks after violent ests in Deng's native Sichuan prov- . There, in Renshou county, farmers already were paying about 18% of r $60 yearly income to the govern- t rebelled when hit with an $8.75 rge to pay for a new road. In early e, 10,000 to 15,000 Renshou residents to the streets, with some attacking mmunist officials, burning police cars, kidnapping policemen.

nfortunately for Beijing, Renshou not an isolated incident. In late , paramilitary police were dispatched Henan province to break up fighting between two rival villages over a land dispute. Reports are also trickling out about new abuses. According to the *China Youth News*, Ding Zuoming, a peasant in central Anhui province, was beaten to death by local authorities after he was recruited by farmers to launch complaints about exorbitant levies. Unable to pay her taxes, one woman in Hunan province committed suicide after officials took her bicycle, pigs, and TV set.

The lure of urban salaries has attracted some 80 million peasants to China's major cities in search of jobs. Per capita income for China's 900 million peasants averages about $105 a year, compared with $350 for urban workers. But even after the peasants find work—usually as construction or factory workers—they feel the pinch. When they mail earnings back home, the post office hands their families an IOU that can take months to convert into cash. Last year, more than $525 million worth of such IOUs were issued.

Efforts to mollify the peasants may not work. Power in China has decentralized to the point where Beijing has lost a great deal of control, particularly in the far-flung provinces. Theoretically, local officials face punishment if they tax peasants more than 5% of their income. But many local authorities simply ignore orders from the center and exact whatever fees they want.

BIG NEWS. The central government is fighting back. The official *People's Daily* reported the June tax rollback with a banner headline on the front page. Meanwhile, Beijing has called for a moratorium on new IOUs and has sent 49 investigative squads to the provinces to look into the problem. National and provincial leaders say they will spend millions this year to buy crops.

Officials hope that these measures will contain the unrest in the countryside, where communication is poor and education levels are low. Even so, most analysts remain doubtful that the government can come up with the cash needed to alleviate the hardships of the peasants. The biggest danger is that displaced farmers will team up with disgruntled urban workers in future protests. If Beijing doesn't succeed in easing the peasants' burden, it risks seeing unrest that could deal its economic reform program a devastating blow.

By Joyce Barnathan, with Dorothy Mau, in Hong Kong and Lynne Curry in Beijing

TO EASE THE BURDEN, BEIJING SO FAR THIS YEAR HAS ABOLISHED 80 TAXES IMPOSED ON PEASANTS

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EUROPE

EUROPE'S SOCIAL CUSHION IS LOOKING RATHER FRAYED

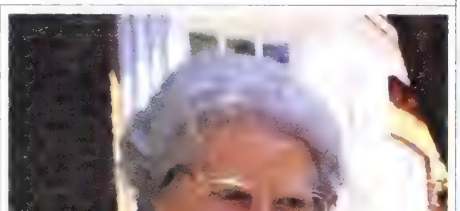
Recession and soaring costs may force cutbacks in benefits

Last April, on the eve of the Hanover Trade Fair, Germany's biggest industry expo, Chancellor Helmut Kohl got an earful from disgruntled German bosses. We're not paying one more *pfennig* in social welfare, they told their leader. Breaking with a century-old consensus that guaranteed the world's plushest social cushion—now costing $590 billion annually—Germany Inc. is in revolt.

The last straw is $9.4 billion a year in long-term nursing-care insurance Bonn plans to introduce next year, to be financed by a payroll tax. Usually, employers meekly split social charges equally with their workers. But this time, they're howling. New taxes, warns German Employers Federation President Klaus Murmann, will "impose an extra and dangerous dynamic to wage costs."

A sudden about-face is sweeping Europe. Only a few years back, Europeans were debating how to extend generous social protection across the new single market to balance sweeping deregulation. But a visionary social charter vanished under the weight of growing joblessness and soaring budget deficits. Universal coverage for health care, pensions, and unemployment gobbles up around 30% of gross domestic product across Europe (chart). Leaders are now agonizing over how to scale back the most expensive items. Some argue that high costs are choking off jobs and will prolong the recession. "It's time to redesign the systems," says Andrew Dilnot, director of London's Institute for Fiscal Studies. "All Western European governments are struggling with this."

From Milan to Manchester, a whipsaw effect is at work. Recession is draining government coffers as unemployment rates pass 10% in some countries, cleaning out benefit funds faster than sluggish tax revenues can replenish them. At the same time, structural problems cut ever deeper into spending. Across Europe, as in the U.S., demand for better and increasingly costly medical treatment has sent health expenditures soaring—in France, up 6.5% last year alone. And Europe's graying populations spell long-term problems for social security pensions systems. French officials warn



WILL BRITAIN CHANGE THE PENSION RULES?

that if current trends continue, France's pay-as-you-go pension system will be bankrupt by 2010. Britain's system, too, is on the brink, and politicians are considering postponing women's entitlement to full pensions until age 65, like men, instead of 60, as currently.

Companies are screaming, insisting their share of the levies is making them uncompetitive in global markets. In Italy, employers pick up more than half the costs, while German companies fi compulsory charges, plus other ben such as paid vacations and mater leave, nearly double hourly wage cos making them the highest in the w In France, companies such as auto r er Peugeot are struggling to com with lower-cost producers around world. "If we are required to com with other countries that offer no s protection," says Peugeot Chairman ques Calvet, "we will continue to away with jobs indefinitely."

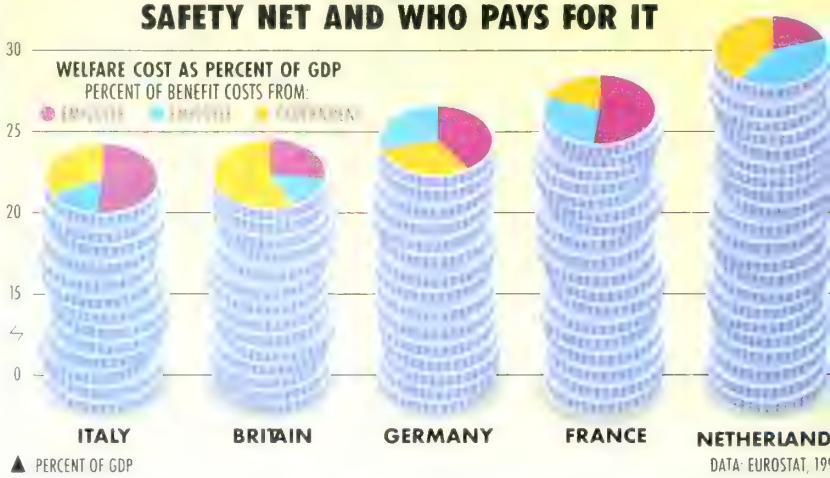
VOTER BACKLASH? Adding to the cr Europe's governments are reeling u mounting budget deficits. Britain is ing a $75 billion gap, approaching 8 GDP. German Finance Minister T Waigel warns that unless he finds billion in spending cuts, Germany's eral deficit will careen to $53 billion year, double the original target. "Ex tations for constantly increasing p perity must be revised," says Waige

Politicians aren't about to cut deeply, though, fearing a voter backl So for now, the big savings will hav come from restricting benefits and r ing everyone cough up a little m France is considering higher hos charges and new user fees for its m cal plan. Germany has strong-ar physicians into prescribing gen drugs whenever possible.

It's no surprise that most Europe want to keep their social net but d want to pay more for it. But as reces bears down and global competition h up, that is proving unattainable. At b Europeans will have to pay the sam or a bit more—for less service. Nob is willing to foot the huge bills to k the old system intact—certainly not G many's bosses.

By John Templeman in Bonn, Paula Dwyer in London and bur reports

THE COST OF EUROPE'S SOCIAL SAFETY NET AND WHO PAYS FOR IT



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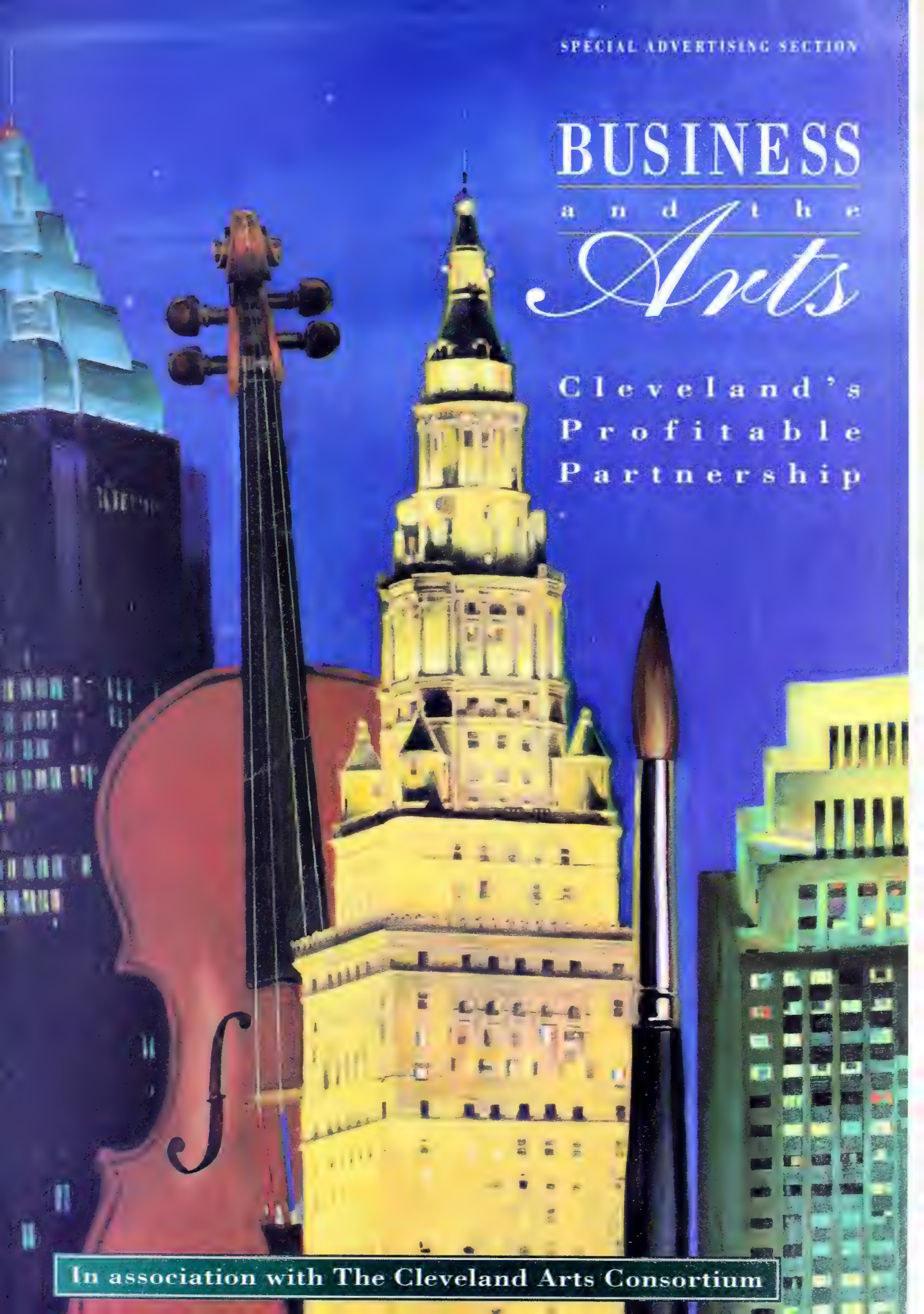

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CLEVELAND'S PROFITABLE PARTNERSHIP

American businesses put $518 million into the arts in 1991.* In fact the figure was significantly higher three years ago. Why it has shrunk is a matter worth pondering — as are the reasons many corporations continue to invest in cultural activity.

Corporate contributions to the arts hit $698 million in 1985, according to an earlier survey done by the Business Commitee for the Arts, Inc. (BCA), a national not-for-profit organization founded 25 years ago by David Rockefeller. By 1988 the dollar figure had slipped to $634 million, and eventually to the current figure.

The decline is attributed to a combination of factors: (1) the downturn in the economy, which has made fewer philanthropic dollars available; (2) increased competition from other nonprofit organizations for that shrinking pool of monies; and (3) the tremendous media attention given in recent years to critical needs in education and human services, for which government funding had been cut back.

"Corporate funders have started putting dollars into these things," says AT&T Foundation Vice-President for arts and culture Timothy McClimon, "and that's taken money away from the arts."

These are in fact the reasons most frequently given by businesses declining requests from arts organizations around the U.S., according to another survey conducted by BCA. But more than half the arts groups polled believe there is another factor: a failure of many businesses to understand what the arts can do for a community—in economic, as well as human terms.

It is a lesson that has been well learned in Cleveland, Ohio, where business and civic leaders not only concur that culture was the flint that sparked a boom in downtown redevelopment, but now talk openly of the "critical" role of the arts in the city's economic future.

In short, they have seen the payoff and the possibilities. And they continue to experiment with imaginative partnerships between business and culture. Some of what has been accomplished in Cleveland, and how it was done, may prove instructive to other cities interested in maximizing the potential of their cultural assets and in understanding the role of the arts in creating a sense of forward motion.

TRUTH, BEAUTY, AND OTHER CONSUMER NEEDS

A recent study undertaken by the Center for Regional Economic Issues (REI) at Case Western Reserve University, at the behest of the Cleveland Arts Consortium, conservatively put the combined, measurable mean impact of arts activity on the Cleveland economy in 1992 at $206 million, and at $236 million for the metropolitan area.

Last year, REI estimates, cultural events in Greater Cleveland drew combined attendance of 4.3 million. More American adults say they would prefer to see an increase in arts programs than sports events, a BCA study found. Indeed, says BCA, ticket sales to all performing arts events rose nationally by 28% over the past five years.

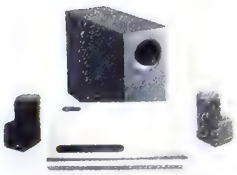
The arts provide a range of experiences for which there is no substitute. And people are willing to pay for it.

But it doesn't end there.

For every dollar spent directly on the arts, says BCA, more than $4 are generated through ancillary spending (transportation, babysitters, parking, meals, etc.). Of course these figures are even higher for arts consumers who journey to a city, such as Cleveland, from some distance. A survey of visitors to three major exhibitions at the Cleveland Museum of Art in 1991-92 revealed that close to 40% had come more than 100 miles to have an experience their own communities could not afford them.

The bottom line— in return for an investment of $307,000 in advertising and promotion — was an aggregate contribution to the local economy of more than $33 million. Admittedly these were three world-

Source: Business Committee for the Arts, Inc.



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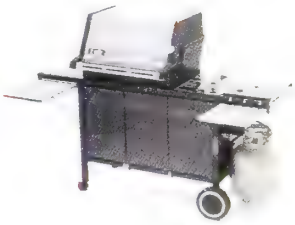

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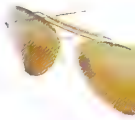

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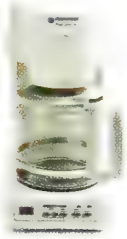

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class exhibitions, two of which went on to Paris and other cultural capitals. ("Egypt's Dazzling Sun: Amenhotep III and His World," created with support from National City Bank, BP America, and the National Endowment for the Arts, broke all previous attendance records at the Grand Palais museum in Paris.) But the numbers may have done more than any other recent development to confirm the growing feeling of the city's business leaders that Cleveland's cultural institutions have been among its least appreciated—and least creatively exploited—economic assets.

Culture as Capital: Re-investing a Community's Inheritance

The value of the arts as educational and civilizing forces, on the other hand, has long been appreciated. Indeed, it was very likely what impelled the business leaders and industrial giants of turn-of-the-century Cleveland to found a dazzling array of institutions, many of them within the incredible space of 10 brief years (1912-1922).

Cleveland was the sixth largest city in the nation then, and the families that had made their fortunes there — among them a co-founder of Western Union and the early partners of John D. Rockefeller—were determined that it take its place among America's great cultural centers. So, in rapid succession, they established, within the two square miles of Cleveland's verdant University Circle: the Cleveland Museum of Art, the Cleveland Orchestra, the Cleveland Institute of Music, the Cleveland Museum of Natural History, the Cleveland Institute of Art, the Cleveland Play House, the Western Reserve Historical Society (later augmented by the Crawford Auto and Aviation Museum), the Cleveland Music School Settlement, Karamu House (the nation's oldest interracial theater and arts center), the Garden Center of Greater Cleveland, and Case Western Reserve University.

Taken together, the city's busine and civic leaders agree, these instit tions (61 in all) constitute a legacy staggering proportions that could not be duplicated today. "The Cleveland Museum of Art's rema able collection was built painstaking object by object, over many years," sa Anne d'Harnoncourt, director of the Philadelphia Museum of Art. One doesn't find pieces of art of such qu ty floating around in the numbers t once were. Nor does one build a wo renowned orchestra—the most reco ed in America—in a day, no matter how much money one has.

It may have been many of these institutions turning 75 within the space of a few years that made Cleveland begin to sit up and take notice of what it has. Banks, corp rations, and law firms responded t appeals for underwriting special 75th anniversary seasons as never before. And the results, as in the case of the museum's exhibitions, were enough to convince business leaders that the arts are a resource whose potential Cleveland has bar ly begun to tap.

Treasures beyond value: (Above) Artifacts from the reign of Amenhotep III, brought together again in Cleveland, and (Right) The Cleveland Museum of Art.

This Could Be the Start of Something Big

The realization that culture ight serve as an engine for economic evelopment was beginning to dawn n some of Cleveland's business lead- 's as far back as the late 1970s when he Cleveland Foundation (TCF) onvened a group of prominent CEOs o look at the prospects of a consor- um of local professional performing ts organizations. Seven of them had een pulled together by the oundation to apply for a $2 million ree-for-one challenge grant from the ational Endowment for the Arts and CF.

The logic was that these struggling oups might have a better shot apply- g en masse than some of them had ad singly. But what piqued the terest of the businessmen was the ct that these arts groups had devel- ped, at the Foundation's urging, eir first long-range business plans. n our world," said one Cleveland ts administrator, "long-range plan- ing was the day after tomorrow."

For the first time, these organizations, which included the fledgling Cleveland Ballet and Cleveland Opera (both founded in 1976), had taken a hard look at where they wanted to be in five years and what they would need to get there. Some $13 million in new support for the consortium organizations was pledged, inaugurating a new era of business-arts relations in Cleveland.

Another part of the plan that appealed to the Cultural Resources Study Committee, the group of business leaders that had led the effort to raise matching funds, was that most of these groups were eventually to take up residence in the proposed Playhouse Square Center. Saved from the wrecking ball only a few years earlier, the interconnected complex of three once opulent vaudeville theaters was being renovated under the auspices of a new nonprofit organization called the Playhouse Square Foundation. It would be the largest theater restoration project in America.

The businessmen were clearly intrigued by the economies of operation that would become possible for these struggling arts groups in a shared facility. Ultimately, $38 million was raised for the project, half of it from private sources including business. The key to corporate involvement, says Richard Shatten, executive director of Cleveland Tomorrow, was in glimpsing the larger possibilities of such a project for the city, which was then languishing in the wake of suburban flight.

Once that bridge was crossed, the rest was easy.

After the renaissance of Playhouse Square, the full recovery of Cleveland's night life took place in the "Flats" along the river.

R.W. Gillespie
President and CEO
Society Bank

"A strong commitment to the community we serve is one of the essential shared values of Society Corporation. We take great pride in Cleveland, our headquarters' city, with its quality museums and performing arts. Nurturing the arts has long been central to Cleveland's vision of a great American city. Strong partnerships between business and arts organizations are an integral part of this vision. Cleveland has seen new arts organizations emerge and tradition-rich institutions grow stronger, resulting in an enriched quality of life for all of our citizens. This community spirit and vitality is what has truly made Cleveland an "All American City."

The Arts as an Engine for Economic Development

"Playhouse Square was never evaluated as an arts project," says Shatten of Cleveland Tomorrow. "We saw it as a unique downtown development opportunity that could someday draw up to a million people a year."

Cleveland Tomorrow, an association made up of the chief executives of the city's 50 largest corporations with revenues exceeding $300 million, was established in 1982 as part of a new resolve by Cleveland's business leadership to put the local economy back on a firm course. And when some in the business community balked at being solicited yet a third time for the final phase of the escalating Playhouse Square capital campaign, it was Cleveland Tomorrow that mobilized the support needed to bring the project to completion.

The creation of Playhouse Square Center was the first large-scale public-private partnership of the 1980s to reach fruition in Cleveland. "It proved that this town could finish something it started," says Shatten. And it acted as a spur to other development in the area. Restaurants and other businesses, led by the investment firm of Prescott Ball & Turben, began moving back into the once abandoned theater district. A new office tower fittingly named Renaissance on Playhouse Square went up, as well as a 750-car parking garage linked to the theater lobbies by a glass-enclosed passageway. Plans also began for a luxury hotel.

With 7,000 seats, Playhouse Square Center today is the third largest performing arts complex in the U.S., only slightly smaller than the San Francisco War Memorial and New York's Lincoln Center. Between 700,000 and 900,000 people attend shows there annually, pumping well over $16 million into the local economy.

Besides presenting touring shows, the Center serves as home to Cleveland Ballet, Cleveland Opera, the Great Lakes Theater Festival, Ohio Ballet, DANCECleveland's presentations of the best contemporary dance troupes from around America, a heavily attended children's theater series, and the lively Showtime at High Noon presentations—presented free under the auspices of Cuyahoga Community College with corporate and foundation support—that are enjoyed by thousands of downtown office workers.

Indeed, Shatten and others are now convinced that the success of Playhouse Square was the long-needed catalyst that enabled the city to begin developing the rest of it's core, after decades of inertia. "It proved that people would come back downtown, even after dark, and in great numbers, as long as there was something exciting to come downtown to" says lawyer John Lewis, who headed up the Playhouse Square capital campaign through its most difficult years.

Before long, restaurants and nightclubs were springing up along both banks of the Cuyahoga River, soon to be joined by new hotels and downtown office buildings. And bulldozers began digging the basin for an exciting new inner harbor, site of the Rock and Roll Hall of Fame and Museum.

As the '90s opened, nearly $5 billion in new development, either planned or under way, was busily transforming Cleveland's skyline.

A Simple Matter of Enlightened Self Interest

If the city's business leaders have come in recent years to see the community's cultural assets as an important key to economic development, the arts continue to be supported in Cleveland, as elsewhere, f

Donald F. Hastings
Chairman & CEO
The Lincoln Electric Co.

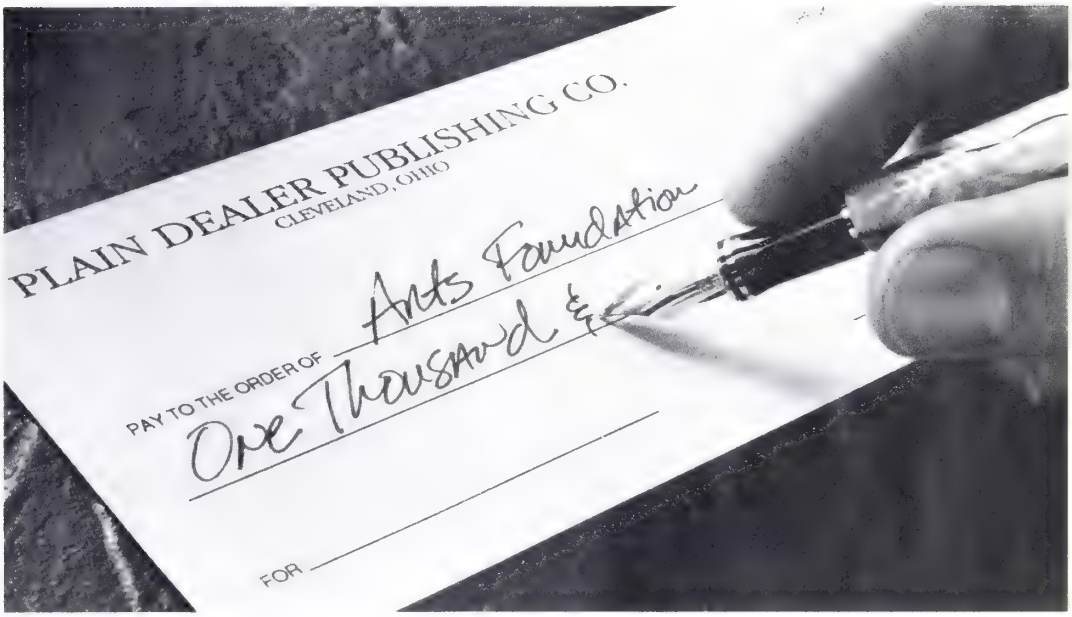
The vitality of the arts in Greater Cleveland is a continuing source of pride and inspiration to the people of The Lincoln Electric Company. In fact, the range of artistic activity thriving here makes it possible for us to support entities and institutions that express some of our most dearly held core values: • Recognizing people as our most valuable asset • Striving continually to be environmentally responsible • Supporting communities where we operate. From the Cleveland Orchestra to the Holden Arboretum, and from the Playhouse Square Foundation to the Cleveland Museum of Natural History, the area's many fine arts organizations uphold world class standards of excellence, while enriching the daily lives of local residents. Lincoln Electric's support of more than a dozen Northeast Ohio Arts Institutions is just one facet of our partnership commitment to this community.

a number of other reasons as well.

Good corporate citizenship is a motive that ranks on most companies' lists. According to a national poll commissioned by BCA, it is the number one motive, cited by 40% of all U.S. companies surveyed that support the arts. (In a BCA poll of

The arts give Cleveland a true presence in the world. The Cleveland Orchestra is the most recorded in America. The meticulously restored Playhouse Square Center is the nation's third largest performing arts complex. And The Cleveland Museum of Art regularly shares major exhibitions with the cultural centers of the world.

This is *here* we do some of our ost important **writing.**



Yes, the arts have done more than just put Cleveland on the map. They've kept us there. While other cities fell into financial straits, our cultural institutions helped renew our city's vitality and attract new growth. In fact, presently, the arts account for some 7000 jobs and $190 million in annual revenues. The Plain Dealer has long been committed to keeping Cleveland arts strong and solvent. We believe it's a contribution from which we all can profit.

Menus whet the appetite... Bon Jovi back in game

THE PLAIN DEALER

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r of fact,
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it suddenly advancing in the rearview mirror, drivers of lesser vehicles instinctively heel about
rrender the passing lane.
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THE STRENGTH OF EXPERIENCE

foreign-based businesses operating in the U.S., the "good citizen" motive jumps to 95%.)

Other benefits often cited include enhancing the company's image, the opportunities sponsorship offers for increased media exposure, creating and sustaining brand recognition for products and services, and generating increased sales.

ALEX MACHASKEE
PRESIDENT AND PUBLISHER
THE CLEVELAND PLAIN DEALER

The strength and grace of dance. The emotional power of music. The awesome beauty of art. In Cleveland, we're fortunate to be surrounded by these extrordinary results of human creativity. They give depth and personality to our city and are one of our most important economic assets. The Plain Dealer is proud to support their efforts. As a member of a special consortium, we're helping to build financial support to bring back the Cleveland Orchestra radio network. And The Plain Dealer's own Arts Section featuring nationally recognized critics Steven Litt and Donald Rosenberg continues to bring the arts news to our readers. The arts are, indeed, alive and well in Cleveland. And The Plain Dealer will continue to help provide the financial and editorial support, as well as the spirit, to help keep these creative forces part of our city's lifeblood.

Some 60% of the businesses polled by BCA say they make a point of supporting those nonprofit agencies, including arts organizations, to which their partners and employees give their time and energy. Many of these also have cultural matching gift programs, contributing anywhere from one to two dollars for every dollar donated by an employee to a local arts group.

Another reason often cited by businesses that support the arts is their need to attract, and keep, qualified employees. "Cleveland's cultural scene is a tremendous asset in this regard," says a Cleveland CEO. "It speaks to what this community is like, and—in the commitment to excellence and the fact that these institutions are so enthusiastically supported—to the quality of the people who already live here."

When a 1990 Louis Harris Survey asked the top executives of local companies and organizations with more than 100 employees to rate Cleveland on 27 factors important to executives in choosing a business location, they consistently ranked the area's top-notch cultural and arts institutions among its 10 greatest strengths. (Residents of the four-county area agree. Asked by the Harris pollsters what they like most about Cleveland, they most often named culture and the arts.)

To John Ong, chairman and CEO of B.F. Goodrich, the arts are "every bit as important as hospitals and schools. They are a part of the infrastructure that enables corporations to attract and keep the kinds of people needed to compete successfully in an increasingly global marketplace." It's no accident that R&D people are the biggest consumers of culture, says Ong, who chairs the national Business Committee for the Arts: "Creative people thrive in a creative environment."

Another reason businesses support the arts is the opportunities the arts offer for entertaining important clients and business associates. "Instead of the same old pair of tickets to a baseball game, they get box seats hanging over the stage and the chance to rub elbows with Itzhak Perlman," says a satisfied sponsor.

Still other business people get involved with the arts because they just plain enjoy it. "There's a lot of pleasure in knowing you've helped make these things possible and in thinking about the pleasure they have brought so many people," says businessman and arts activist Henry Eaton. "Realizing that you've made a difference in the life of this community—there's tremendous satisfaction in that."

THE ARTS: PART OF WHAT MAKES A CITY LIVEABLE

Cleveland business executives are unusually active and engaged as trustees of cultural organizations. Indeed, future historians of the period may well find that some of these fierce attachments have played a stronger role in the decisions of certain corporations to remain in Cleveland, or move back.

Alton Whitehouse, who was chairman of the board and CEO of Standard Oil of Ohio (SOHIO) from 1977 to 1986, now readily admits that Cleveland's superior cultural institutions were "an important factor" in SOHIO's decision to stay, when other businesses were heading to the sunbelt and to build what is now the corporate headquarters of BP America on Public Square: a development of inestimable impact for a city then perceived to be on the ropes.

For Whitehouse, a passionate

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member of the Cleveland Museum of Art's board of trustees for more than two decades (president, 1985-91), moving south, as other oil companies were doing, was unthinkable.

BP, which acquired controlling shares in SOHIO in 1987, has continued to support the arts in a big way. It is the major corporate funder of the Cleveland Orchestra, whose nationally syndicated weekly broadcasts were underwritten by BP to the tune of $900,000 annually from 1984 to 1992. The British-owned company has continued to work with the orchestra on audience development, sponsoring free summer concerts at Northcoast Harbor.

This August BP will focus its efforts on four family-oriented concerts at Blossom Music Center, the orchestra's summer home in the wooded hills of the Cuyahoga Valley, with family coupons available for the asking at BP gas stations throughout the area. "It's a natural partnership," says a BP executive. "You have to drive to Blossom to hear the Orchestra; we sell gasoline."

Cleveland's Secret: Creating Synergies

One of the enduring lessons of Playhouse Square was that cultural organizations have more to gain by working together than by going their own ways. Over the past decade, a series of collaborative efforts among the city's arts groups has been stimulated and encouraged by area business leaders — especially those who sit on the board of an extraordinary instrument and community resource known as The Cleveland Foundation.

Built up over the past 80 years by private and corporate gifts, the Foundation is today the second largest community trust (of 300-plus) in the nation, with assets in excess of $710 million. Of the $30 million it distributes annually in grants to local efforts at applying innovative thinking to community concerns and challenges, some $3.5 million goes to arts and culture.

But, given the growing size and urgency of the community's needs across the boards in recent years, the Foundation's governing board of prominent citizens and business leaders has sought ways to make even those dollars stretch further. Two studies commissioned by the Foundation in 1984 and 1987 turned up some astonishing information, not only about the regional market for Cleveland's cultural offerings, but about patterns of consumer use of the arts. As a result, the city's professional arts organizations have been sharing mailing lists, in some cases box office operations, and joint marketing efforts — wit heartening results. In 1987, some 20 professional performing and visu arts organizations based in Greater Cleveland came togethe with the Foundation's encouragement and support to form the Cleveland Arts Consortium.

The Consortium has undertake a variety of projects including the study of culture's impact on the area's economy referred to earlier. revealed, among other things, tha the combined operating budgets o the 42 arts institutions included in the survey amounted to $111.3 million in 1992 — more than $90 million of which was spent locally; tha cultural activity was generating more than 8,000 net new jobs in th metropolitan area, and that during the 1980s, $60 million in new construction was undertaken by area cultural institutions, translating in jobs and permanent infrastructure which continue to enhance day-to-day living, as well as the image and prestige of Cleveland.

Cleveland Ballet's Swan Lake set an American box-office record — and gave the community a much needed shot of pizzazz.

The Key to Tourism: Building a Critical Mass

The care and feeding of Cleveland's cultural institutions has become a matter of great importance to the city's business leadership. It is now perceived as a key factor in Cleveland's bid to become a visitor destination in the '90s and beyond.

The pieces are falling into place: hotels, restaurants, a lively nightlife scene, and of course the city's varied cultural attractions, headed by a world-renowned orchestra, a world-class art museum, and two professional theaters that are breaking new ground and turning national heads with their best work. Not to mention strong regional opera and ballet companies, the nationally recognized Cleveland Chamber Symphony, and a lively alternative theater and performing arts scene.

In fact, TRW's Al Senger believes, the medium-size and smaller arts groups are vital to a truly exciting cultural mix. It is the cultural scene taken as a whole that appeals to tourists: what folks around Cleveland these days refer to as "a critical mass." And it is coming together.

But for international, or even national tourism, a city needs at least one unique attraction that you simply can't find anywhere else. For Cleveland, say business leaders, that is going to be the official Rock and Roll Hall of Fame and Museum, an $84 million facility designed by internationally known architect I.M. Pei, for which ground was broken last month at Cleveland's new Northcoast Harbor. If you build it, they will come, the logic goes, and then they'll stay to see everything else. And the sound of the cash register will be heard again in the land — as the city prepares to celebrate its 200th birthday in 1996.

Having moved the Hall into the realization stage after years of planning, and with a new stadium complex going up a few blocks away, Cleveland Tomorrow and the city's other funders are now turning their attention to additional public attractions, including a Great Lakes Science, Environment and Technology Museum, also to be located at the harbor's edge, and the excitingly conceived Great Waters of the World Aquarium, a world-class facility to be built at the nearby mouth of the Cuyahoga River, where the New England surveyor Moses Cleaveland stepped ashore nearly two centuries ago.

The Challenge to Business: Use Your Influence

If there is a worry, it is that in reaching for the brass ring, Cleveland may be stretching its resources a little thin. Others argue that the money is there; it is only a question of channeling it sensibly and deliberately to the right strategic points.

The business community clearly faces a monumental challenge — to see that Cleveland's cultural treasures are secured, as new jewels are added to the city's crown.

In the end, the nation's businesses will only be able to provide a part of the funds required to realize such dreams and keep such a quality of life with all the benefits it brings to commerce and community. Far-sighted business leaders must continually search out other ways to work toward these ends—using their influence as board members or directors on other businesses, financial institutions and foundations; helping shape the civic agenda; exploring mutually beneficial partnerships between cultural and other community resources such as universities and the media; and pressing goverment at all levels to assume its appropriate share of the cost of maintaining a vibrant cultural life in cities throughout the nation.

Cleveland has seen the future. And it works.

Copy written by Dennis Dooley, Cleveland Public Radio's award-winning producer for culture and ideas, with assistance from Harriet Wadsworth, director of The Cleveland Arts Consortium.

Just north of Memorial Plaza, I.M. Pei's Rock and Roll Hall of Fame (Right) is taking shape.

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EDITED BY STANLEY REED

ZERBAIJAN'S SQUABBLES RE SPOOKING BIG OIL

hese days, the young women in the hard-currency bars in the basement of Baku's old Intourist hotel are dancing with each other. Most of their usual partners—rough-s from Western oil companies—have fled Azerbaijan's al, following a warning from the U. S. State Dept.

or five years, Azerbaijan has been locked in a bloody ute with neighboring Armenia over the territory of Na-o Karabakh. With Armenian nationalists controlling near-l of Nagorno Karabakh and some 15% of Azerbaijan, the k waves from the conflict are spilling into Azerbaijan itself.

NG OUT. Azerbaijan's military has n increasingly discontented with the g war effort. When the government l to disarm a mutinous garrison in e, the second-largest city, in early , a nationwide revolt broke out. Af-ust three weeks, the rebels' 34-year-eader, Surat Husseinov, has gained rol of most of Azerbaijan.

he democratically elected President lfez Elchibey has left Baku for the y of his native Nakhichevan—a re-region cut off from the rest of Azer-n by Armenia. Inside Baku itself, Haydar Aliev, a former general and Soviet politburo member, wields power. The tion now is how he will deal with Husseinov.

he Azeri power struggle may spell an end to Turkey's ving influence in the region, and it threatens one of the d's biggest oil plays. A group of international companies been negotiating with the Azeris over drilling rights to ster fields in the Caspian Sea estimated to hold more 5 billion barrels. Although the terms of the deal have yet e worked out, British Petroleum and other oil giants grit-their teeth and paid $70 million to the Azeri authorities as ne 21 deadline passed.

he companies, which also include Amoco, Pennzoil, McDer-t, and Unocal, think Azerbaijan has too much potential to pass up. They are also betting that whoever prevails will forge ahead with the oil deal. But they are nervous. With President Elchibey and his top oil officials likely to be ousted, there will be—at the least—delays. The American companies are also suspicious of a recent Azeri move to lump all the companies together into one big consortium, because that makes a BP/Statoil (Norway) group the largest shareholder. "We were about to start pumping serious money into this place, but now it looks like we are back to square one," said one company executive.

REBEL BOSS HUSSEINOV: MAKING GAINS

It is hard to foresee any quick return to stability. There are too many centers of power. One revolves around the 70-year-old Aliev, who is already acting like a head of state, receiving foreign emissaries and executives.

THIRD FORCE. But Husseinov could spoil Aliev's plans. A rich merchant who made his reputation in the war with Armenia, Husseinov commands a formidable militia—which looks increasingly like the national army itself. A third force, ex-President Ayaz Mutalibov, who was ousted from power in 1992, may soon return from exile in Moscow.

All three of these men have close ties to Russia. In contrast, the fugitive President Elchibey's leanings are toward neighboring Turkey and the West. (The Azeris are a Turkic people.) The Russians would like to bring Azerbaijan, which has refused to join the Moscow-dominated Commonwealth of Independent States, back into their sphere of influence. They would also like a proposed pipeline to bring Azeri oil to the sea to run through Russia rather than Turkey and Iran.

The Russians have provided some backing for the Armenians and are rumored to have aided Husseinov. When the dust clears, Russia will likely have friends in power in Baku.

By Thomas C. Goltz in Baku, with Deborah Stead in Moscow and Richard A. Melcher in London

OBAL WRAPUP

VESTING IN PALESTINE?

another sign of optimism about he Arab-Israeli peace talks, an in-national conference of Palestinian l foreign businessmen is scheduled September in Jerusalem. The con-ence will deal with investments in occupied territories once autono-is in place. It has the ambitious l of attracting $10 billion over the t few years. The meeting has the primatur of Palestinian negotiator isal Husseini and the approval of Israeli government, which believes ssive investments in the occupied ritories would help solve the prob-of how Palestinians who have been working in Israel are to earn a living. Tens of thousands have been put out of work by Israel's closure of its borders with the territories.

UKRAINE IN CRISIS

Political stability has been Ukraine's banner of achievement since its citizens voted for independence in 1991. Not anymore. A bitter power struggle and crippling labor unrest have brought calls for an autumn referendum on confidence in both President Leonid M. Kravchuk and the parliament. Neither is likely to survive the vote. Kravchuk's snail-paced reforms have led to economic stagnation, with inflation at 35% monthly and privatization only inching along. The temporary karbovanets currency is losing value even against the weak Russian ruble. Trebled prices on staple goods helped trigger an explosive 11-day coal miners' strike that has renewed separatist sentiment in Ukraine's Donbass region, where ethnic Russians live. The miners are mostly back at work now. But the President, parliament, and Prime Minister Leonid Kuchma are still battling over how power should be divided to end Ukraine's crisis. "It is a catastrophe," says Ukrainian economist Volodymir Chernyak. "And if something is not done in the next few months, we'll have nothing short of a total collapse of the economy."

THOMAS GOLTZ

POWER SHIFT IN JAPAN

MIYAZAWA'S FALL SIGNALS A NEW ERA, BUT CHANGE WON'T BE SWIFT

Japanese politics for the past five years have been nothing if not topsy-turvy. Two Prime Ministers have been ousted by scandal. Another was toppled overnight, because of ineptitude, by ostensible allies. But for sheer shock value, none of those incidents rivals the sudden demise of incumbent Kiichi Miyazawa.

On June 18, in a dramatic vote of no-confidence, 475 members of the Japanese Diet's House of Representatives strode one by one to the speaker's rostrum and deposited a yellow or blue tile in a transparent box. Yellow meant yes on the no-confidence motion, and blue meant no. Miyazawa's fate, until then very much in the balance, was decided when Representative Hajime Ishii reached the podium and boldly dropped a yellow tile in the box. Cheers erupted, because his vote meant that a 35-member group of ruling Liberal Democratic Party was bolting.

The result has thrown Japanese politics into the greatest confusion since the mid-1950s, when the conservative LDP began its 38 uninterrupted years in power. The immediate reaction from many quarters has been euphoric. Public opinion polls show that there is massive support for the anti-Miyazawa forces. "There's a chance to change the flow of politics and to create a new political system," says Nobuo Sasuga, a director of the Kansai Federation of Economic Organizations.

LAME DUCK. But what kind of system, and when? Short-term, the implications are worrying. Miyazawa, forced to call late-July elections that will almost certainly end his 20-month tenure, will be a disgraced lame duck when he hosts President Clinton and other leaders of the world's seven industrial powers at their annual summit, in Tokyo, on July 7th. As such, he'll be unable to commit Japan to much of anything. Japan's ability to respond to Clinton's efforts to curb the surging $50 billion trade deficit is also at least temporarily diminished. Says a senior Clinton Administration official: "I won't pretend this doesn't make it more complicated."

What's more, the possibility that a fractious coalition will rule Japan for at least a while could undercut the government's ability to stimulate its domestic economy as a spur to world growth. Economic management is largely the province of Japan's resourceful and powerful bureaucrats. But without strong political pressure, which only the long-serving LDP knows how to apply, the ultracautious Ministry of Finance delay further stimulus.

Longer-term, Miyazawa's overt almost certainly augurs a long-aw shift of power to a younger gene of politicians, whose values and atti differ sharply from those of the old men who have run Japan World War II. These elder s men have felt beholden to a p ful America, whose postwar b olence they can't forget.

"YOUNG TURKS." By contrast, ers now in their 50s seek a independent, assertive Jap keeping with its economic These men want to impose gr control over the bureaucracy, more authority to local go ments, deregulate Japan's e my, and change the constituti allow the military to take pa international peacekeeping ef This portends a Japan that lo bit more like the West on one yet retains what the Japanes gard as the best characterist their own system.

Just as this Japan won't n sarily be more receptive t trade demands of the West, s will a new Japan increasingly to operate as an equal wit U.S. "Some of the Young Tur the LDP don't remember World II or any history, and they are ver ficult," says Kozo Yamamura, a specialist at the University of Was ton in Seattle.

Representing the new generatio the two men who toppled Miyaz Ichiro Ozawa and Tsutomu Hata, are former LDP heavyweights and were members of its previously nant faction, named after former Minister Noboru Takeshita. Ozaw has served as Minister of Home A

WHAT POLITICAL 'REFORM' MIGHT MEAN

Under Japan's current system, as many as six representatives to the Diet are elected from a single district. Because so many candidates compete against each other, they need more money to grant favors and win votes.

SINGLE REPRESENTATIVE

The most important piece of reform legislation would limit each district to one representative. That might reduce politicians' need for campaign contributions.

DATA: BUSINESS WEEK

Cabinet Secretary, and secretary-
al of the LDP. One of Japan's savvi-
olitical operators, Ozawa was once
rotégé of the now-disgraced strong-
Shin Kanemaru, and he is known
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g of Japan's media. He, too,
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elieve that Hata is an improve-
over Miyazawa is the sheerest
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son, a professor at the Univer-
f California at San Diego.

D SCRAMBLE. The two "rebels" be-
heir bid for power last fall. When
er-fixer Kanemaru was arrest-
r campaign-finance infractions,
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Takeshita faction. They set up
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r some time, Ozawa and Hata
argued that one solution to
n's money politics is replacing
multimember constituencies
single-member districts. They
say Japan can't behave like a
n-up country in world affairs
until there's a viable opposition that forces real debate on issues. This, presumably, would help Japan stake out persuasive positions and even lead debate in international forums.

What lies ahead defies Japan's most clairvoyant political analysts. On June 23, Ozawa and Hata announced the formation of the new Renaissance Party. Ten other LDP Dietmen quit the mother party and formed their own new one, called the Pioneer New Party. All in all, a total of nine parties will be contending for seats in the July 18 elections.

FEAR ITSELF. Early betting says that Hata and Ozawa will wind up forging a coalition government, including members from both the LDP and the opposition. But veteran observers, noting the LDP's remarkable resilience over the years, aren't ready to count the ruling party out yet. If it wins 200 to 220 seats out of the 511 total, it could lure the Buddhist-backed Komeito Party into a coalition. Hata's group will be hard-pressed to mobilize the candidates and funds to get enough of its people elected.

Moreover, some experts, such as Robert Orr, director of the Institute for Pacific Rim Studies at Temple University Japan, note that the LDP can dredge up the "fear factor" to ask voters if other, inexperienced parties can be trusted to run the economy and U.S.-Japan relations. "Voters still feel safer with the LDP," adds Ikuo Kabashima, a professor of political science at Tsukuba University.

Undoubtedly, however, the forces Ozawa and Hata represent will ultimately prevail, if only because the older generation will have to move on. The outcome will be new Japanese leaders who have stronger ideas about what their country's role should be and how to get there. It should also gradually usher in a "civil society," in which political issues get full and free discourse, says Yasunori Sone, professor of political science at Keio University in Tokyo.

So there undoubtedly will be change in Japan, but as always, it will be slower and more subtle than the outside world expects and many Japanese voters would wish.

By Robert Neff in Tokyo, with Douglas Harbrecht in Washington

(CLOCKWISE FROM TOP LEFT) PHOTO LIBRARIES BY AP WIDE WORLD (KANEMARU, MITSUZUKA), HASHIMOTO SYGMA (WATANABE), REUTERS BETTMANN (KOMOTO), HARUYOSHI YAMAGUCHI SYGMA (OZAWA), HASHIMOTO SYGMA (HATA), BRAD MARKEL GAMMA (ALSO: MIYAZAWA)

WHY JAPAN CAN STILL SAY NO

Its unique brand of capitalism will remain resistant to pressure from the U.S. and Europe

Walking out of an Italian restaurant in Tokyo one evening, a fortysomething Japanese manager confided to a couple of American friends that he soon would be asking his boss for a leave of absence, after working on U.S.-Japan issues for several years. "I really like American people," said the intensely emotional dinner partner. "But I just can't stand the American government anymore."

Japan's elites always have talked tough. They have been saying "no" to the U.S. for years, making grudging compromises only at the last minute. But there's a new tone these days, as Japan recoils at the incessant rat-a-tat assault of trade demands from the Clinton Administration. "We won't be subject anymore to unilateral threats" is an increasingly common line.

The reason for the worrying escalation in Japan's defiance of U.S. trade demands is this: Despite the appearance of crisis in Japan's politics, a new power equation is emerging in U.S.-Japan relations. For the first time, America is encountering a Japan considers itself every bi equal and, in many ways

Leaders of the world's industrial nations will g taste of this when they scend on Tokyo on July 7 their annual summit. Many arrive with demands that Japan its markets to more imports and shift savings-driven economy to one that consu more. They may assume that an economic weakened and politically confused Japan wil quiesce. But Japan is much stronger than t recognize. Because it is driven by big busi and bureaucrats—with politicians wielding less power than in the West—Japan is in a p tion to resist the pressure, and it will. Says frustrated U.S. official involved in talks aime opening Japan's construction market by J 30: "I didn't budge them, not even an inch."

So, too, are the Japanese increasingly candi rejecting appeals to abandon uniquely Japan systems and values and head down the path ward a more Western economic and polit system. The hoopla surrounding the recent

vedding demonstrates that ancient institu-
s live on. Japanese still refer to their bureau-
y as *okami*, or "honorable ones above." And
national anthem, once in disrepute because of
mperial hue, is heard more and more often.
ne Japanese may eat at McDonald's and shop
oys 'R' Us, but on a deeper level they seem
e embracing the
sage of an ear-
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Japan That Can
'No,' by politi-
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s argue that the
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in Nagata-cho, Tokyo's political district, will
ve to be a revolution that shatters big busi-
s' grip on politics (page 68).
thers argue that Japanese women, unhappy
n workaholic husbands, will be the wedge
forces fundamental change in favor of consu-

JAPAN'S ECONOMY IS STRONGER THAN IT LOOKS

AND IT'S STILL GROWING. UNEMPLOYMENT AND INFLATION ARE MINIMAL, THE SAVINGS RATE IS HIGH—AND JAPAN IS THE ONLY OECD COUNTRY RUNNING A BUDGET SURPLUS

mers, thereby benefiting foreign makers of goods. Another view is that there may be a labor shortage that cripples Japan's economy. Perhaps the most enduring hope is that younger generations of more "internationalized" Japanese may refuse to work hard enough to sustain the economic machine that their parents have built.

In reality, however, none of these pressures is as overwhelming as some believe. Yes, they will force Japan's system to adapt, as it has adapted so ably in the past. But this change will occur gradually and within the confines of Japan's own culture and economic system. Even young people who have lived abroad are not about to destroy the heart of a system that has produced such wealth. "The 20- and 30-year-olds are working harder than my generation did," says Mitsuharu Ishii, a director at Sumitomo Corp. "My engineer son was born and raised in the States and speaks better English than Japanese, but when he comes home at night he usually calls his boss to make sure everything is O.K."

Similarly, there are some ominous economic signs. Banks are creaking under perhaps $500 billion in bad loans. Corporate profits have tanked, and the stronger yen won't help them recover. Employees are worrying about their job

security. The electronics industry trails other countries in such key areas as software and telecommunications. American companies have been able to grab back market share in the U.S. auto market. In short, Japan is no longer the invincible world-beater of earlier Western nightmares.

But Japan does retain many strengths that have been overlooked as the excesses of its late-1980s "bubble economy" get purged. These strengths include the continued viability of its *keiretsu*, or corporate groupings. Even though some Japanese companies have started pursuing such Western-style goals as fatter profits and closer attention to shareholders, they're preserving crucial links to other members of their *keiretsu*. Other strengths include high savings, a highly skilled work force, and an awesome buildup of economic prowess in booming East Asia. Japan hasn't faded away.

In fact, Japan's modest pace of economic growth could soon accelerate. Inflation and unemployment basically don't exist. Many companies are cash-rich and are sitting on cutting-edge plants and technology. Their cost of capital still is competitive with the rest of the world's. The rising yen hurts, but as senior American executives doing business in Japan note, the end result will be more efficient Japanese competitors. "Tougher conditions for them will only make things tougher for me," says James C. Morgan, chief executive of Applied Materials Inc., the leading U.S. supplier of semiconductor-production equipment.

JAPAN'S DEPENDENCE ON THE U.S. MARKET IS DECLINING

IN 1986, 38.5% OF JAPAN'S EXPORTS WENT TO THE U.S. BUT LAST YEAR, ONLY 28.2% DID

At the same time as its economy is displaying such resilience, Japan's dependence on the U.S. as a market has been greatly reduced. Japanese exporters are engaged in a massive switch to Asia, both in investment and trade (chart, page 74). This spells less leverage for the U.S. "Japan's options are definitely broadening," observes Kent E. Calder, director of Princeton University's program on U.S.-Japan relations. "Anybody who has recently been to Hong Kong or booming southern China understands what Japanese electronics and auto companies are looking at." This year alone, for example, Japanese steel exports to China should more than triple, to 7 million metric tons.

SCARY NUMBERS. Japan's Asian neighbors will continue to climb the technology ladder and eventually will take over some Japanese markets, but Japan will stay ahead of the pack in leading-edge manufacturing sectors for years to come. "East Asia will be the only growth center of the world economy, and Japan is situated in Asia," says a senior Finance Ministry official. "We will benefit."

Others cast a more alarming picture. "Japan is taking strategic control of East Asian markets," says Kenneth S. Courtis, strategist at Deutsche Bank in Japan. What's more, C adds, "everyone in the world needs money, but an incre amount of that money is in the hands of Japan and Throughout the region, the U.S. is clearly falling b thanks to the blistering pace that the Japanese and Asians are setting.

U.S. leverage over also has declined be the end of the cold wa reduced Japan's reliar America for security. Administration officia correct in asserting th pan wants U.S. troo remain in the region counterweight to Chir to help ensure stabili the Korean peninsula Japan's need for a n umbrella and a rap sponse to Soviet t pouring over the hori gone. By failing to ac for this, America is "r culating" its approach pan, according to the danren's Nukazawa says: "There's a less on the value of the al Japanese people are f we can talk back an what we want to say.

Even though the nese are dismayed at political system, this of confidence extends largely invisible "old who run Japan's eco In fact, the ability of of Japan Governor Y Mieno and other to reaucrats to manage landing for Japan's b economy has demonst once again for most Japanese the virtues of their s brand of capitalism. In a remarkable rescue of the stock market this spring, bureaucrats engineered a so price keeping operation, which catapulted the Nikkei from the brink of catastrophe to a nearly 50% rise. Th administrative guidance and by tweaking regulations, the

THE FUNDAMENTALS OF JAPAN'S ECONOMY

ed the country's troubled main banks through the end of ky fiscal year, defying warnings of failures.

questionably, Japan faces painful restructurings in its cor- e and financial sectors, and job security is less sacrosanct before. But the safety net provided by Japan's main-bank m, its *keiretsu* ties, and the supportive bu- racy cushions many of these s. In case after case, the vling *keiretsu* have to the rescue of their ers and affiliates. For ple, Nissan Motor Co. ndergirded Fuji Heavy tries, maker of Subaru with management help chemes for co-produc- nd co-design. Also, Su- no group arranged for nerger of its bankrupt estate affiliate Itoman another group compa- as saving virtually all n jobs. The list goes d on.

YON DAYS. When the ese compare this per- nce with Bill Clinton's ling start, America's ility is eroded in their All this has contribut- the new power equa- that is emerging be- n the U.S. and Japan. not sure the U.S. has ea how much our lev- with Japan has dimin- " says James C. Abeg- a veteran consultant in Tokyo and the au- of several books on Ja- "Our line of credit is to close."

at doesn't presage a Japan, nor does it st that its companies un rampant across the . Nor does the new power balance mean that Japan is letely turning its back on the U.S. Tokyo remains pain- aware of its lack of friends and of its need to sow seeds ernational goodwill. Even as it seeks greater maneuver- om, it will attempt to maintain relations with America. t that does not diminish the need for America to seri- ously rethink its way of dealing with Japan. Traditional trade policy won't work in curbing Japan's $50 billion surpluses with the U.S., particularly since the offshore push of Japan's top companies has turned them into global powerhouses. Retaliation of the sort long threatened has too many boomerang effects. Tariffs, the primary weapon, can be effective only in a handful of cases, and they cannot wipe out the deeper competitive imbalances. In short, Japan has now become too sophisticated and too confident to be shaped by the blunt trade instruments of a bygone era.

JAPAN'S NEED FOR THE U.S. MILITARY IS EBBING

WITH THE END OF THE COLD WAR, AMERICA'S NUCLEAR UMBRELLA CARRIES LESS LEVERAGE

What then must be done? The influential school of Japan-watchers called revisionists, whom BUSINESS WEEK first identified in 1989, were successful in changing the world's perception of Japan. Such experts as Chalmers A. Johnson, Clyde V. Prestowitz, Karel Van Wolferen, and others argued that Japan operates according to different rules and that change in Japan is not tantamount to Westernization. That analysis clearly has impressed the Clinton Administration. But the revisionists have never agreed on the best way to respond to the Japan that they portrayed.

What's needed now is another conceptual leap—call it Revisionism II—toward tackling the West's competitive imbalances with Japan. A broader strategy is needed in Washington, one that will recognize exports as the engine of growth and that will give U.S. companies better footing in Japan. That means not only lower trade barriers but also stronger and better coordinated export-promotion programs, new incentives for investment in Japan, and continued reform of antitrust laws at home. This more systematic array of policy instruments should extend the battle from the negotiating table to the competitive trenches, where it is most needed.

RIGHT DIRECTION. There are some hopeful signs. Although the Administration's demands for numerical targets for measuring market-cracking progess is currently winning the most attention, the Clinton Administration is not putting all its eggs in that basket. "They're proceeding along the line they committed to in the campaign," says George M.C. Fisher, CEO at Motorola Inc. and chairman of the nonpartisan Council on Competitiveness.

Fisher notes the Administration's moves to bolster funding of the National Science Foundation, to reorient government laboratory work toward more commercial applications, and to improve education and training. President Clinton has also sent important signals to Detroit's Big Three auto makers, sitting with them to discuss ways of building the "clean car" of the future.

That kind of government-business cooperation would have been unthinkable in the Reagan or Bush eras. "This Adminis-

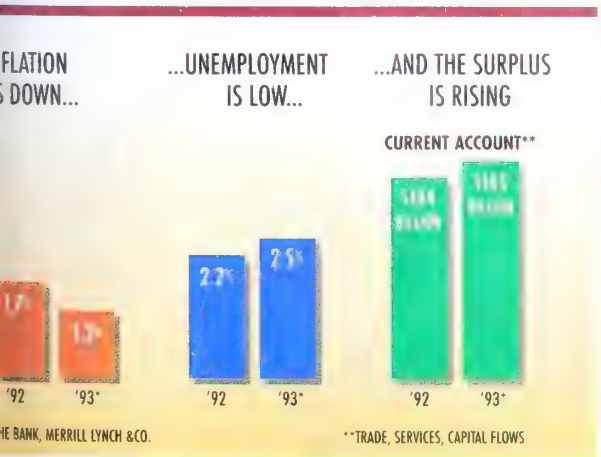

ILLUSTRATION: BY RICO LIPS

tration hasn't dropped the ball," says Motorola's Fisher. "It's working in the right direction."

But there's an enormous distance to go. Clinton has inherited a "patchwork quilt of policies" toward Japan, says Mark Foster, a former Tokyo-based negotiator for the U. S. who now helps foreign companies enter Japan. The U. S. government needs to move more aggressively, he says, to encourage collaborative efforts among U. S. companies attempting to compete with Japanese rivals. And in addition to fixing Uncle Sam's export-promotion machine, the U. S. should ease cold war controls on high-tech products. Too much of Washington's bureaucracy is aimed at preventing U. S. exports, not encouraging them.

In some respects, the needed strategy toward Japan hinges on a new psychology and a new set of attitudes. The Americans, for example, have allowed adversarial relations between labor and business and between government and business to diminish their competitiveness against Japan. Chalmers Johnson, known as the godfather of revisionist thinkers, argues that what is necessary is "changing the American environment" to cope better with a Japan that is "stonewalling" on the trade front.

One important lesson is that government alone doesn't have all the solutions. As Motorola and other successful foreign companies in Japan have shown, teaming up with Washington to play hardball against Japan can pay—but only when all the other ingredients are in place. Witness the Motorola/Washington victory in 1989 for entry into Japan's pocket-phone market. Fisher maintains that his company's unremitting devotion to quality, productivity, and cost-cutting was key. "We couldn't have gained access without competitive products," he says.

But in too many other cases, American trade negotiators have claimed victory, only to find that companies aren't truly interested or able to compete. In the early 1980s, Washington made baseball bats into a huge issue. But once Japan relent-

JAPAN STILL HAS CONFIDENCE IN ITS BRAND OF CAPITALISM

THE KEIRETSU, THE BUREAUCRACY, AND MASSIVE NATIONAL SAVINGS HAVE CUSHIONED JAPAN FROM THE WORST POTENTIAL BLOWS OF ITS RECENT DOWNTURN

ed and allowed imports, U. S. companies barely respo
And despite the years Washington has spent batteri
Japan's construction market, a surprising number of
construction companies have not set up offices in Japan
tablished credentials to make bids. Coordination betwee
vate sector and public sector has been spotty at best.

NEW JOBS. Ultimatel
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The risk is that the
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By Robert N
Tokyo with Willi
Holstein in New
and Douglas Har
in Washington

JAPAN SEES ITS FUTURE WEDDED TO ASIA

*S. Korea, Taiwan, Singapore, Hong Kong, Thailand, Malaysia, Indonesia, China DATA: DEUTSCHE BANK, MITI

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POLICY

A PRODUCTIVITY JUNKIE TAKES ON FAT CITY

Can the Vice-President keep Clinton's vow to cut federal waste?

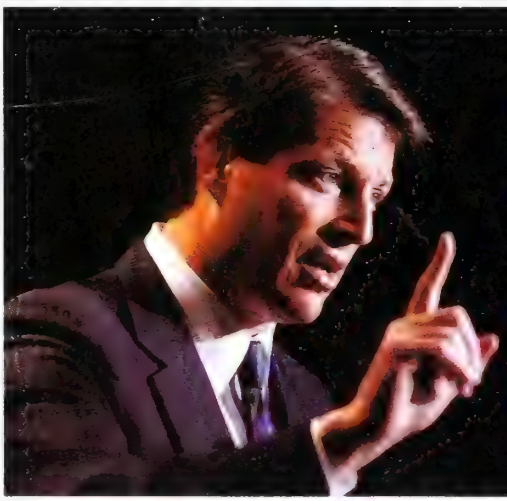
Bill Clinton couldn't have been clearer in his campaign manifesto, *Putting People First*. "It is time to radically change the way government operates," he said, urging "a shift from top-down bureaucracy to entrepreneurial government." Clinton promised that he would do to the bloated government bureaucracy what many corporate executives have done at their companies: Use technology and current management techniques to boost efficiency.

ident Al Gore. Since April, Gore has been meeting regularly with agency bureaucrats and soliciting reform ideas from the private sector. And on June 25, he'll hold a town meeting in Philadelphia to discuss reform measures with management experts from all over the country. Meanwhile, hundreds of staffers from various federal agencies have been crawling around the warrens of the government looking for inefficiencies that can be rooted out.

shuffling. "We're not going to re mend new departments or big shif departments," says David Osborn White House consultant who has wr widely on ways to increase efficien state and local governments. "Wher do that you expend tremendous pol capital and set off incredible turf w

TWO TRACKS. For now, the White H is moving on two parallel tracks. first, called the National Perform Review, is an attempt to address is that cross government agencies, su procurement and management. At same time, Cabinet secretaries are pected to come up with ways to prove performance at their own sl Clintonites are patterning their paign on a similar exercise in Te which state officials claim will cut by more than $2 billion.

But if Clinton is to succeed, the r will be only a first step. Says K "The critical question is what kin



GORE'S GOVERNMENT OVERHAUL

PERSONNEL Revamp rigid civil-service system to give managers flexibility to promote and fire, create work teams, and set merit pay

PROCUREMENT Break down centralized purchasing to let line managers buy, ditch the "use it or lose it" budget system that encourages unnecessary purchases and creates shortages o needed material

TURF Improve communications among the many agencies whos work overlaps to provide "one-stop shopping" for citizens seeking information or aid

RESTRUCTURING Foster a new debate over federal-state duties but avoid sweeping reorganization of federal agencies

DATA: BUSINESS WEEK

The rhetoric resonated with voters, who were fed up with waste in Washington. Besides, in an era of fiscal restraint, the idea of delivering more for less is an imperative for an activist such as Clinton. "Taxpayers feel they are getting Kmart government at Saks Fifth Avenue prices," says Elaine C. Kamarck, who helps run the Administration's reorganization team. "Our job is to make government work better and cost less." The Clintonites will try to do that by targeting processes—such as procurement, labor-management relations, and communications among agencies.

BOX-SHUFFLING? As innocuous as it sounds, Clinton's drive is certain to be highly controversial among federal workers, Congress, and even business, which has grown comfortable with the inefficient but predictable status quo. To demonstrate the program's high priority, Clinton turned the job over to Vice-Pres-

Gore, a productivity junkie, is getting high-level help from Kamarck, a well-connected New Democrat, and Philip Lader, a certified Friend of Bill and deputy director for management at the Office of Management & Budget. Says Donald F. Kettl, a political science professor at the University of Wisconsin: "No Administration in recent memory has made government performance such a high priority."

By September, all this activity is supposed to produce a package of recommendations. They'll be controversial, even though the Administration is avoiding some fundamental questions about the role of government. A handful of senior White House aides would like to scrap some federal agencies and shift many responsibilities to cities and states. But others, haunted by the Carter Administration's failed reorganization attempts, deride such moves as mere box-

follow-through will there be." Du Ronald Reagan's presidency, the h publicized Grace Commission re went nowhere, in part because Re never followed it up with real cha Even if every Gore recommendati acted on, Clinton will have just b reshaping the hidebound bureauc "The U. S. government does not ge invented in six months or four ye says Lader. "It'll take decades."

Clinton can impose some changes self, but he'll need backing from gress and the federal-employee u on other proposals. And there ar ready hints that the Administrati running into trouble on both fronts

Months ago, some Capitol Hill porters urged Clinton to take ste shortcut congressional second-gues They wanted the President to pro legislation that would give him blanche reorganization authority u

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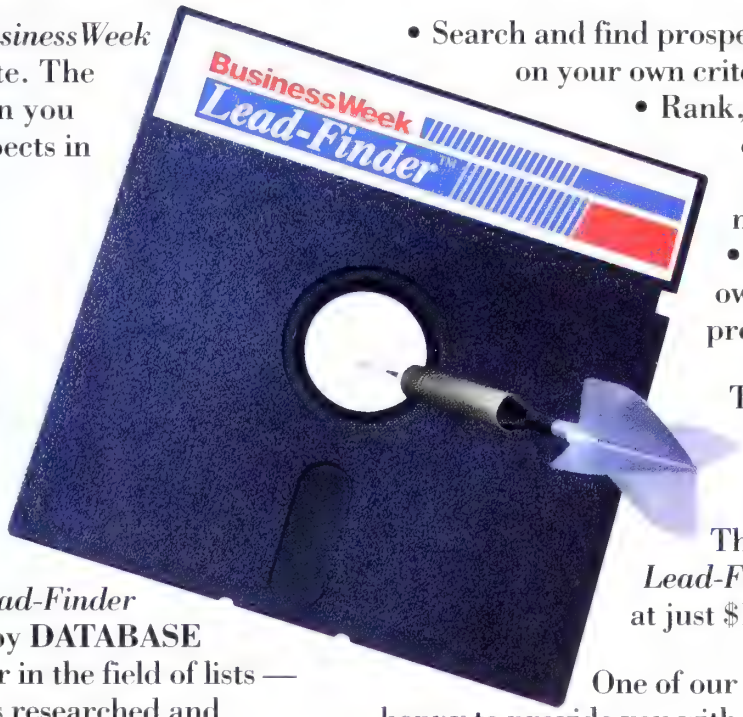

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his moves were blocked by Congress within, say, 30 days. Clinton rejected the advice, choosing instead to wait until he had reform proposals in hand. Now, he risks having his ideas nibbled to death by scores of turf-conscious Capitol Hill subcommittees. Worse, congressional backers worry that Clinton has done little to prepare lawmakers for his overhaul. Says one Hill ally: "They are not doing the political work they need to."

For their part, federal-employee unions fear that reinventing government is merely code for cutting jobs and pay. Gore has tried to smooth relations with bureaucrats by bringing hundreds of them into the process. But the unions aren't buying. "This is not Texas," remarks John N. Sturdivant, president of the American Federation of Government Employees. "And it damn sure ain't Arkansas."

SCARED. These days, Gore's staff is sifting through 3,000 pages of recommendations from the task forces (table, page 76). But some broad outlines are becoming clear. One idea is to grant more autonomy to managers in hiring, promotion, and procurement. That may mean breaking down the highly centralized federal purchasing system, as well as restructuring rigid civil-service pay classifications.

The reinventers also want to improve communication among agencies. For instance, as many as 125 different offices in 14 agencies provide job-training assistance. The Clintonites won't try to consolidate them but will attempt to make it easier for them to share information. Another goal: setting up a one-stop-shopping arrangement where individuals, businesses, and local governments can get information about related programs offered by more than one agency.

The White House feels it can solve many of these problems by cutting away layers of bureaucracy. "The whole mentality is one of control. You have checkers on checkers," says R. Scott Fosler, president of the National Academy of Public Administration. "People are scared to do anything at all." The White House hopes to free bureaucrats to seek creative solutions without worrying about ruining their careers. "The big question," says Kamarck, "is how do you make government accountable without adding significant costs."

That is, undoubtedly, a big issue. But there is a bigger one. With battles looming on trade, health care, and the budget, will Bill Clinton be willing to spend his dwindling stack of political chits on yet another massive reform project—especially one that is sure to run into powerful resistance? If not, all this work will end as yet another dusty report on how to reform the bureaucracy.

By Howard Gleckman in Washington

THE GREAT REFRIGERATOR RACE

How a Whirlpool design team chased $30 million in prize mon

It was crunch time. On June 2, two Whirlpool Corp. engineers walked into a testing lab in Cortland, N.Y. They had eight hours to scrutinize data showing that their prototype had failed miserably. At stake: a year and a half's worth of work, plus a $30 million prize and big-time bragging rights for the manufacturer that could create and sell a refrigerator that was both environmentally friendly and energy efficient.

TO BUILD A BETTER REFRIGERATOR: THE WHIRLPOOL TEAM AND THE FRUIT OF THEIR LABOR, AN OZONE-FRIENDLY APPLIANCE

Whirlpool, America's second-largest refrigerator maker, had beaten out its archrival, giant General Electric, and a dozen others to become one of two contest finalists, along with Frigidaire, the No. 3 maker. But now, just two days before the final deadline, Whirlpool had been told a compressor in its prototype at the testing lab had failed.

The story of Whirlpool's all-out effort to win the contest illustrates a new twist on industrial policy. Its backdrop is a movement among environmental and other groups to use market force public-private coalitions, rather th igation and laws, to promote soci environmental goals. At the same the contest also provides insigh ways to reinvigorate some U. S. facturing industries. By dangling came to be known as a $30 m "Golden Carrot" before a group o ufacturers that had weathered decade of consoli and restructurin contest spurred th explore importan technologies and ine their product- opment processes it prompted the t nalists to design efficient refriger which should them more compe

The notion of th test began in 1989 the Natural Reso Defense Council (a few utilities, ar Environmental P tion Agency got t er to explore wa cut energy consum They knew that erator makers soon be revamping product lines for mandated improve in energy-efficienc an impending ba ozone-depleting c fluorocarbons (CFCs). The NRDC ar utilities, which find it cheaper t mote energy savings than to pa new power plants, wanted to se fridge makers go even further an er than the EPA requirements, sin frigerators can account for up t of a household's electricity use.

Instead of calling for new laws came up with the Super Efficient erator Program Inc., or SERP. It is ed entirely by 24 utilities that p electricity to about 21% of U. S. holds. The winning refrigerator

ve two goals: eliminate CFCs and energy efficiency by at least 25% current regulations. What makes ontest so tough is that the goals one another: In the last 20 years, gerator makers have cut energy mption 50% mainly by using CFCs.

PAYOUT. Steep as the technical es are, merely creating a winning x won't be enough. Instead, the estants must address a complex ination of product development, facturing, and marketing challeng- he victor must con- the judges that it uild and sell enough erators between Jan- 1994, and July, 1997, oduce the total kilo- hour savings it prom- s part of its bid. To sure the winner ers those savings, $30 million prize be handed out in p sum but in the of a rebate of $100 for each of 50,000-plus fridges sold. The rebate help the winner keep onsumer price of the models in line with s' price tags.

e winner will be an- ced June 29. While ing certain proprie- data on its technolo- ff the record, Whirl- allowed BUSINESS to follow its ef- . Frigidaire dis- d its efforts only completing its en- page 81).

plans for the con- became known in Whirlpool executives n't even sure they ld enter the race. had enough on their s just coping with ing sales and bracing the tough new EPA going into effect in Vincent P. Anderson, ngineer with an MBA, got the job of ng out the contest. Anderson, then ad been head of the company's long- ling efforts to gradually phase out coolants, so he was a natural choice. Evansville (Ind.) native had grown the business: His father and one er were engineers at the Whirl- refrigerator plant there.

March of 1992, Anderson drafted Ho to join his group, which came to nown as the Golden Carrot Project . Born in Hong Kong and educated innesota, the 44-year-old Ho worked in product design, planning the 1993 models. Anderson began by asking Ho the obvious question: What could Whirlpool do to win this thing, given what was cooking in the company's R&D labs?

For an answer, Ho began trying out different combinations of technologies. Some were exotic: One that eventually went into Whirlpool's SERP prototype was an adaptive defrost control that uses "fuzzy logic" software to save electricity during the defrost cycle. Ho figured the energy savings at 3.5% or more. He was also already at work redesigning the defrost drain for some 1993 models. A simple change in its shape yielded energy savings of up to 1%.

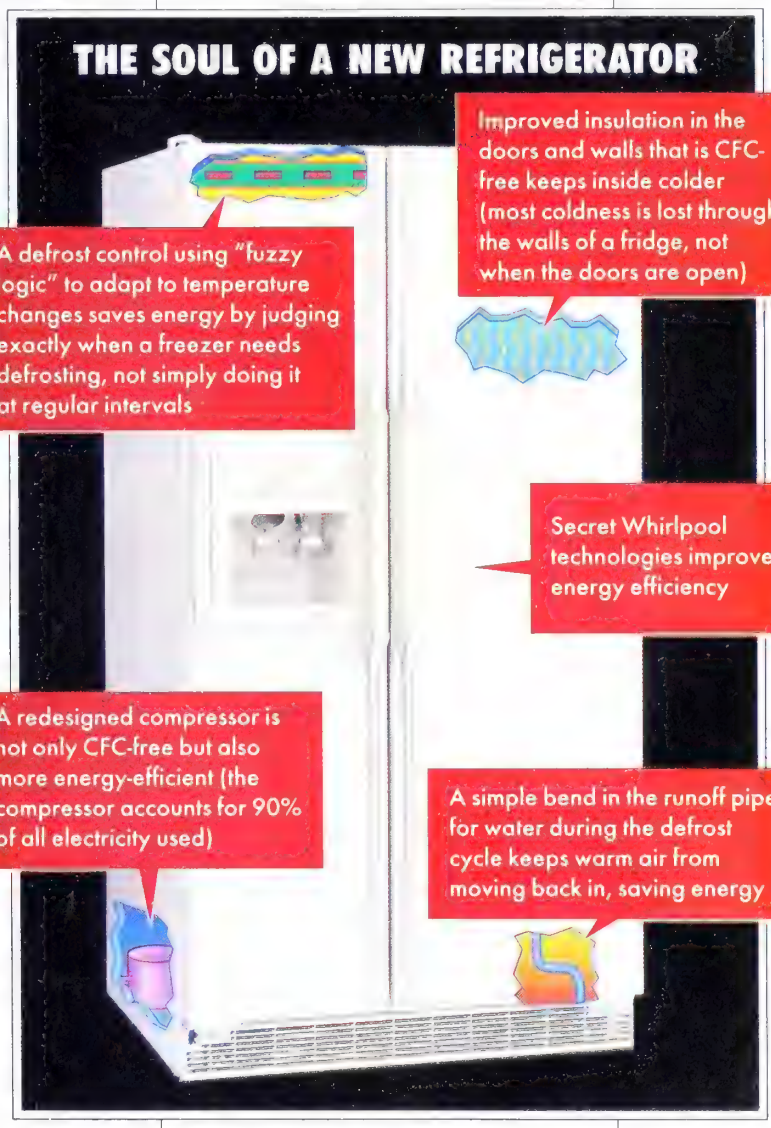
The Whirlpool team's toughest problem was replacing CFCs, which are used in two ways. CFC-11 helps produce the foam that insulates a refrigerator, while CFC-12, commonly known as Freon, is the actual refrigerant.

Anderson set up a system filled with HFC-134a, a substitute for Freon. He had the very narrow capillary tubes that carry the refrigerant specially made out of glass. At the hairpin curves of the capillaries, where the inside diameter was less than 0.3 inch, Anderson could see a slight buildup of gunk. It was like watching a person's arteries clog. "This is the engineer's worst nightmare—a very slow failure," said Anderson. Undetected, it could result in millions of breakdowns and huge recalls years from now. "It could break the company," said Anderson. The Whirlpool team knew the culprit wasn't HFC-134a itself but a lubricating oil in the compressor, the heart of a refrigerator. They finally found an oil that wouldn't cause the buildup.

HARD DECISION. Ho and the team moved quickly through a number of other technologies. A new compressor, redesigned specifically for HFC-134a with a higher-efficiency motor and valving changes, squeezed out several points more in energy savings. On the other hand, a supplier's promising but expensive technology didn't deliver the expected energy gains. Anderson nursed it along for months but would ultimately decide it wasn't up to snuff just seven weeks before the final bid was due in June, 1993.

By August, 1992, Anderson had two possible bids. One was conservative, using only tried-and-true technologies, while the other pulled out the stops. In a senior management meeting that month, Jerry Weinstein, a Whirlpool vice-president, convinced the group to go for the second, more risky bid by invoking the specter haunting the company: GE. "Will we be able to look ourselves in the mirror if GE wins it because we didn't enter the most aggressive bid possible?" he asked.

On Dec. 8, SERP announced the two finalists: Whirlpool and Frigidaire. Anderson and his team were stunned—not because they were in, but because GE was out. With roughly 35% of the market compared to Whirlpool's 25% and Frigidaire's 17%, GE had a natural advantage in the contest. The way the rules were written, 75 of 100 points in the bid went for total kilowatt hours saved, determined by energy-efficiency gains



HOMETOWN BOY: TEAM LEADER ANDERSON

per fridge multiplied by the number of units sold. Since GE already sold the most refrigerators in a business where market shares change at a glacial rate, Anderson feared it stood the best chance of convincing the judges that it had the muscle to sell more of the newfangled fridges. GE says it doesn't know why it lost, and SERP won't comment.

PATENT SEARCH. Now squared off against each other as the two finalists, Whirlpool and Frigidaire began meeting almost monthly with a group from SERP to hammer out details of the final bid rules. The Whirlpool team held one such meeting last Mar. 30 in Fort Smith, Ark., the site of one of the company's three U. S. refrigerator plants. After the SERP representatives left for the airport, the Golden Carrot team's anxiety seemed to crest. "How are we doing?" a local manager asked the team. "I wish I knew," Anderson sighed. "It's a void." The Fort Smith executive fretted: "This train has left the station big-time. If we don't win, senior management of Whirlpool is going to be concerned."

Upon reflection, though, Anderson and the others started to feel pretty confident. Whirlpool had analyzed Frigidaire's 1993 models and conducted a worldwide patent search to see if its rival had some whiz-bang technology up its sleeve. It couldn't find any. That left hanging only the other half of the contest's equation: sales. If Whirlpool could hold its market-share advantage while increasing its energy savings by at least the same amount as its rival, it had a lock on the contest.

Anderson was more worried about ETL Testing Laboratories Inc., the independent lab whose judgments would be crucial to the contest. Although he didn't question ETL's engineering competence, its refrigerator-testing business had dried up when the industry consolidated a decade ago, and its spending on testing gear had consequently lagged. Mostly, Anderson and Ho fretted over how the judges would react to test results different from those used by Whirlpool as the basis for its energy-use claims. ETL says its refrigerator-testing data are accurate.

Last May 12, Whirlpool management ironed out the final version of the team's bid in a teleconference. Anderson offered three detailed options for Whirlpool and three estimates of what Frigidaire would bid. His conclusion: Frigidaire would have to garner a huge chunk of market share, lose money, or both, to get anywhere near Whirlpool. Weinstein and Neil Lynch, general manager of the Whirlpool brand, were still worried.

Utilities, they argued, seemed to believe that consumers would flock to energy-efficient refrigerators even though Whirlpool's experience showed that wasn't true. Indeed, its bid assumed that its market share would remain the same. But would the judges simply be-

DRAFTED: ENGINEER/DESIGNER HO

lieve Frigidaire if it said that its ket share would double with the s efficient models? "They wouldn't to do it, they'd just have to say t do it, to win," grumbled Weinstein vous, the group decided to use a te ogy twist to enhance Whirlpool' slightly.

JAWS OF DEFEAT? Anderson's tean with SERP officials for the last tir June 2. The team unveiled a pl track refrigerator sales in order to sure the units, and their energy ings, went into areas served by th test's sponsors—another key rec ment. Next, Phyllis Woolley, the t ad specialist, explained Whirlpool's keting plans—the final four points contest. The folks from SERP se impressed.

Then, Terry Stat, SERP's liaison ETL, dropped his bomb: The com

THE CONTEST FOR A LEAN, GREEN, COOLING MACHINE

The Super Efficient Refrigerator Program (SERP)

PARTICIPANTS Whirlpool and Frigidaire, a unit of Sweden's Electrolux

DATE Winner to be announced June 29

SPONSORS 24 utilities (encouraged by the Environmental Protection Agency)

PRIZE $30 million, winner take all; payment comes in the form of a cash rebate to the manufacturer per refrigerator sold

RULES Winner must manufacture and sell over 250,000 refrigerators between January, 1994, and July, 1997, that are free of ozone-depleting chlorofluorocarbons (CFCs) and at least 25% more energy-efficient than 1993 federal standards

JUDGING There are 100 points:

75 POINTS for kilowatt hours saved as determined by energy-efficiency ga per refrigerator, multiplied by number units sold

21 POINTS for a tracking system tha pinpoints who buys the new refrigerat and where (ensuring sales are within t sponsoring utilities' markets)

4 POINTS for vigorous sales and marketing strategies

DATA: BUSINESS WEEK

a Whirlpool prototype ran at 100% vhile at the lab, then simply shut In addition, the laboratory's early ata could not confirm the compaaims of efficiency. "It sounds like a essor failure to me," said Stat. son stared at the conference table nt of him in shock. This was too He began to massage his temvith his fingertips. "I think you want to have Bob Ho go up said Stat.

erson's quiet voice barely betrays frustration, he offered to send six-page letter listing Whirlpool's ns about ETL's procedures. ETL the problem, countered Gary rom, SERP's CFO from Pacific Gas etric Co. "The major issue here is ilure. I think you should get up and find out what caused that."

hin two hours of arriving at the b, Ho relaxed. ETL's subsequent test results were in line with his own. Scanning the readouts for the failed unit just before it shut down, he got an idea. When he and a colleague hooked up the unit, they quickly confirmed his diagnosis: The prototype's hand-wired cooling fan wasn't turning. The compressor continued to run, but the override circuit detected too much heat and, to prevent a possible fire, turned off the unit. No compressor failure whatsoever. Just the fan, jury-rigged for the prototype.

"IT'S DONE." On June 8, Anderson sent off Whirlpool's bid—bumped up yet again. After another Weinstein pep talk, the team had found a way to squeeze more units out of the factory, increasing the kilowatts saved. "It's done, it's frozen," Anderson said. "Now, we just sit back and wait." He left June 15 on a two-week camping trip with his family and in-laws around Lake Michigan.

The SERP utilities believe that regardless of who gets the $30 million, everyone wins. Other refrigerator makers will have to come up with efficient offerings to compete with the victor's model. And the contest has succeeded in pushing technology. If Whirlpool wins, the company will immediately sign purchase orders for equipment to tool up for a key new technology, something it wouldn't have done so soon without the promise of the prize money. "We've won before the first one is sold," exults Charles Montoya, a SERP director and executive at the Los Angeles Water & Power Dept.

Asked what he would tell the team if Whirlpool doesn't win, Chairman and CEO David R. Whitwam pauses, then says: "I'm not good at giving losing speeches. I don't think I've ever given one." He'll soon find out if he needs to learn.

By James B. Treece in Evansville, Ind.

FRIGIDAIRE'S RUN FOR THE COLD CASH

rigidaire President Hans G. Backman didn't need much convincing that his company should try to the refrigerator competition hed by a group of utilities. Frigi- Co. was already hard at on more efficient units of chlorofluorocarbons). "Just the time frame was er," says Backman. A win l also help Frigidaire with ain strategy: to set apart p brand and firmly differte its products. So last Au- Backman gave the Super ent Refrigerator Program SERP) contest the nod.

meetings at its refrigerator in Greenville, Mich., Frigi- brought together as many marketers, engineers, and facturing officials to brain- the entry. By then, Frigi- had already made the first decision: to drop all exotic ologies. "In order to meet imetables, we felt it was ssary to take known technology enhance it," says Dennis E. oskey, head of the company's rator business and team leader.

ING AWAY. Frigidaire also decided on to base its SERP models on ew UltraStyle line, a 1992 design haul featuring a rounded look, on a new production line in the nville plant. For its SERP proto- Frigidaire put a "smart" compresnside the cabinet. It was already designed by Americold, which Frigidaire is owned by Sweden's Electrolux. The compressor is said to be the first to rely on a computer chip that recognizes the load and raises or lowers the operating rate accordingly, instead of simply turning on or off.

THE GREENVILLE GANG: MANY 70-HOUR WORKWEEKS

Frigidaire was also well along with replacements for CFCs. The company already had reformulated its foaming agent to cut the CFCs in its insulation by 50%. Still, the company had to do plenty of further refinement and testing to cut out the rest. It got help from Americold and Electrolux, which recently introduced some CFC-free models in Europe, in shifting to HFC-134a as a refrigerant.

Making further energy-efficiency gains also wasn't easy. A small group worked seven days a week, often 10 hours a day, from before last Christmas until this May. The team was taken aback when a key component expected to get one-third of the needed energy savings hardly provided any. "That was a low point," says product planner Brian P. Dillon.

Backman says he's happy now that he went through with the SERP bid, but he wasn't always so certain. "There have been one or two times we asked: 'Shall we continue or not, considering all the other projects we have?' " Stretched for resources, Frigidaire had to delay other new products. In addition, some of the UltraStyle line on which the SERP models are based may have been experiencing more failures than expected at the Greenville plant—though the company says its startup problems were normal.

Even if Frigidaire wins, "it's not a bonanza," says marketing chief Arjan J. Gursahaney. But the SERP contest has forced Frigidaire to slash in half, to nine months, the time it usually takes to develop a product and has pushed it to put "gold" in the system with its new compressor, as McCloskey puts it. Because of the compressor's cost, that's something Frigidaire wouldn't have done without the prospect of SERP's prize money. In the end, consumers are likely to see some of Frigidaire's SERP models whether or not it's named the winner.

By Zachary Schiller in Greenville, Mich.

Commentary/by Christopher Farrell

SHUT OUT IMMIGRANTS AND TRADE MAY SUFFER

Americans are hurting. So are the Japanese and Europeans. In the U. S., unemployment is high and job prospects bleak. Japan's economy is mired in its worst downturn in two decades. Unemployment is expected to hit 12% in Europe. And more and more, workers in the major industrialized nations are blaming immigrants for everything from lost jobs to overburdened social services.

No wonder. Over the past several years, immigrants have poured into the rich nations. Nearly 10 million came to America in the past decade, and newcomers now make up about 8.5% of the U. S.'s population. Western Europe is catching up fast. Officially, foreigners comprise 6.4% of France's population and 8.2% of Germany's, but these figures understate actual inflows. Japan, which has long kept out outsiders, saw the number of foreigners overstaying their visas go from 20,500 in 1989 to 280,000 in 1992.

Why the surge in immigration? Some immigrants, such as the refugees from Bosnia and Herzegovina, are fleeing civil war. Natural disasters also drive millions from their homes. And, of course, the lure of higher living standards in the U. S., Europe, and Japan induces many to leave behind grinding poverty.

MARKET FORCES. But the forces behind the current immigration wave run even deeper and will intensify in coming years. For one thing, the rise of the global economy has forged strong trade and information links between developed and developing nations. And these trade routes for goods and services are now becoming bridges for people to cross into the richer countries.

Just as important is the move toward market economies around the world. Capitalism is both speeding the pace of economic growth and creating all sorts of economic dislocations in the developing countries. "Over the short term of one to two decades, the effects of successful and rapid economic development are profoundly destabilizing and tend to increase the impetus toward outmigration rather than moderate it," says Michael S. Teitelbaum, program officer at the Alfred P. Sloan Foundation.

Recent history shows that fast growth and a rising standard of living lead to more emigration—not less. In the 1970s, economic growth for of the leading emigrant coun ranged from 5% to 9% a year, Saskia Sassen, professor of u planning at Columbia Univer South Korea's economy, for exa boomed at a 10% annual rate, the highest in the world for decade. Yet S Korea was also country with the est-growing lev migration into U. S. during the

TALENT HUNT. Lo China. That coun per capita incom surged by some since 1989, as nomic opportun have soared with freer mar Yet the smugg ship carrying n 300 illegal Chi immigrants that aground off York City on Ju was only a minu part of a massiv flow of Chinese the U. S. and countries. In re years, the boo economies of In sia and Malaysia have been a source of immigration to the U. S. gal immigration into Japan has been coming mostly from such tively well-off developing natio Thailand, Malaysia, and South K countries with strong trade an vestment bridges with Japan, Columbia's Sassen.

The North American Free T Agreement, if passed into law, also hike immigration into the from Mexico. Most economists e the Mexican economy to surg trade and investment between two neighbors increases with N Rising Mexican incomes mean Mexicans will be able to affor leave the country, says Jagdish B wati, an economist at Columbia versity. In addition, America's cultural technology will displace of Mexico's rural labor force. same holds true for Eastern

THE IMMIGRANT TIDE

	Foreign population as a percent of total population	
	1985	1990
AUSTRIA	3.6%	5.3%
BRITAIN	3.1	3.3
GERMANY*	7.2	8.2
SWEDEN	4.6	5.6
U.S.	7.0	8.5
SWITZERLAND	14.5	16.3

*Former West Germany

DATA: ORGANIZATION FOR COOPERATION & DEVELOPMENT, URBAN INSTITUTE

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Western Europe: As the previously closed economies of the East open up to the world trading system and growth picks up, immigration will remain strong into the West.

Multinational corporations and export-oriented companies, on a global talent hunt, also stoke the immigrant express. They recruit bright young people from the developing world and help them settle in the U. S. and Europe. Other immigrants come to the industrialized nations as students, then stay. More than 1 million students, primarily from the developing nations, are in school in North America, Western Europe, and Japan, says Aaron Segal, a political scientist at the University of Texas at El Paso. And the demand for immigrant labor in service-sector industries is pulling in unskilled migrants from the developing countries.

The global communications revolution also adds to the immigrant stream. Cable News Network and MTV are surely signs of rising living standards overseas. Yet they expose many foreigners to far higher living standards in the U. S. and Europe. Telephones and faxes let immigrants keep in touch with family and friends, and these social networks encourage others to follow. "High tech has just revolutionized migration," says Nestor Rodriguez, a sociologist at the University of Houston.

TRADE CONNECTIONS. Immigrant entrepreneurs further strengthen ties between their new homelands and the old countries. With a global perspective and ready-made contacts overseas, immigrants often start export-oriented companies. These companies boost the trade and finance links between nations. And they open up another means for new immigrants to work their way into the developed nations.

Unconstrained, immigration into the industrial world is certain to grow rapidly in the 1990s. And for countries such as the U. S. and Germany that are already experiencing a huge inflow of immigrants, this poses some difficult choices. On the face of it, calls to close down the borders make some sense. But the costs to the world economy may be too dear. Freer trade is propelling the global economy forward—and trade and immigration reinforce each other. So a move to curtail the movement of people may in the end also reduce the flow of goods between nations.

Economics Editor Christopher Farrell co-authored the July 13, 1992, cover story "The Immigrants."

FROM THE GULF WAR TO THE WAR ON CRIME

Westinghouse is converting its military hardware for use by po

Last March, a small, slow-flying aircraft lifted off a runway near Baltimore and headed southwest. It was no ordinary plane. Its big, bulbous nose was crammed with radar and infrared sensors. Its cabin was packed with computers and communications gear. And its mission was as unusual as its appearance: to spy on David Koresh and his Branch Davidians, who were barricaded in their compound at Waco, Tex.

As it turned out, the debut of Westinghouse Electric Corp.'s multisensor surveillance aircraft wasn't exactly a dazzling success. Koresh's enclosed compound didn't lend itself to surveillance from the air. The plane's sensors merely confirmed that there were people inside the buildings. Still, Westinghouse was determined to take advantage of the opportunity to introduce the plane to the federal agents gathered in Waco.

Westinghouse hopes that such demonstrations can drum up new business for its slumping defense unit, the Baltimore-based Electronics Systems Group. Struggling along with other defense contractors to adjust to the post-cold-war era, Westinghouse is gradually converting much of its military hardware for use by law-enforcement agencies to help offset the steady drop in Pentagon spending. "A lot of people think of conversion as Grumman [Corp.] building buses," says Richard A. Linder, head of Westinghouse's defense business, referring to an ill-fated diversification by the aerospace contractor. "But if you're in electronics, you have multiple options."

DRUG SENSORS. So far, Westinghouse's biggest crime-fighting success has come in the home-security market, where it is second only to ADT Security Systems in the number of households it serves. And though the company has yet to sell much of its high-tech gear to U. S. law-enforcement agencies, Linder is betting that orders will start rolling in over the next couple of years once police departments see the effectiveness of the company's gadgetry—and its wide range of products. Several agencies say they'd be interested once the products are perfected.

In addition to the surveillance aircraft, the company is also devel handheld biosensors that police ca to detect traces of drugs and bomb ing chemicals on a person's skin clothing. Also on the drawing bo computers to link police cars direct FBI headquarters and provide office the field instant information, inclu fingerprint analysis (table).

The new strategy at the defense which accounts for a third of its ent's revenues, is critical to Wes house's long-term health. Following astrous real estate losses at W inghouse Credit Corp., the Pittsbu based company desperately needs business. Analyst Nicholas P. Hey of NatWest Securities Corp. estim that operating earnings could ris 7% this year, to $800 million, but o revenues may slip 2%, to $8.3 billi

The way Linder sees it, Wes house's defense business was a v not only of Pentagon cutbacks b its own success. During Oper Desert Storm in 1991, company e tives prided themselves on the pe mance of the huge AWACS surveil planes that were loaded with Wes house radar, heat sensors, and com cations gear. But Linder says the ac cy of the high-tech weaponry durin gulf war convinced Congress and public that the military was equipped. Consequently, most o budget cuts came out of procurem NatWest's Heymann estimates that at Westinghouse's defense unit

WESTINGHOUSE HOPES CRIME-FIGHTING PRODU

SURVEILLANCE AIRCRAFT Cut-rate versio tary's AWACS. Airborne radar could be u tect illegal immigration, drug trafficking.

HOME SECURITY Protection package incl burglar alarms and motion detectors. Co center in Dallas notifies local police of intr

BIOSENSORS Machines to detect cocaine making chemicals on people's skin and cl

SMART POLICE CARS Computer to link po directly to the FBI. Information on suspects fingerprint analysis would be available im

TESTING RADAR ON A SURVEILLANCE CRAFT: FBI AGENTS GOT A LOOK IN WACO, TEX.

by 9% this year, to $2.6 billion. help reverse that decline, Linder ed to go after nonmilitary markets. enforcement agencies were seen as tural extension of Westinghouse's ing customers, Linder says, since military and police often perform ar tasks. And by adapting its exist- echnology, Westinghouse could avoid ost of developing entirely new prod- says Linder, 62, an electrical engi- who has been with Westinghouse's ronics unit for 35 years.

e surveillance aircraft Westinghouse down to Waco, for example, is a ate version of the AWACS. Instead of a huge Boeing 767, Westinghouse oaded its high-tech equipment into a sh-made Britten-Norman twin-engine turboprop. The plane may not have the range or sophistication of an AWACS, but it still boasts elaborate radar and sensor systems. And at $10 million a plane, it's a bargain compared to the more than $200 million for an AWACS.

Even that price tag may be too steep for local police departments. But Linder sees potential uses for the plane by federal agencies that want to monitor illegal immigration or drug smuggling. The Forest Service has also expressed interest in the plane for the detection of forest fires. There's also the foreign market to consider. In June, Westinghouse sold its first surveillance aircraft to the Turkish government.

PROBABLE CAUSE. Adapting its sensor technology, Westinghouse is also trying to perfect a new handheld biosensor to detect minute traces of cocaine. By wiping a small brush across a suspect's skin or clothing and then inserting the brush into an electronic box the size of a calculator, a police officer can know, in a matter of seconds, whether the person has been in contact with drugs. Also in the works is a sensor to detect nitroglycerin, a chemical used in bombs.

Westinghouse says the new gadgets would help police establish probable cause for a wider search. But some police officers aren't so sure. "If you don't have probable cause in the first place, that tool would be useless," says James Dickerson, of the Pittsburgh Police Dept.'s Narcotics Div. Baltimore police, who are testing the biosensor, currently ask a suspect's permission before using the device.

The company still faces some long-term hurdles. States and local municipalities are wrestling with the kind of budget constraints that forced the Pentagon to cut spending. But Westinghouse believes it can price its products low enough to sell. The biosensors will sell for $2,000 apiece.

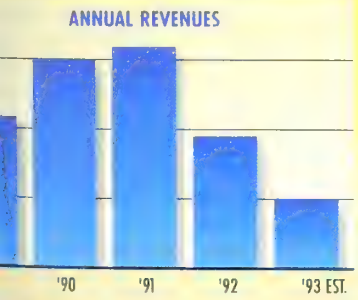
PRICE WAR. For the moment, however, sales in the security market are easier to come by. Westinghouse has landed some big corporate and government clients, including the U. N., for its electronic locks and alarms. It has done even better with homeowners, thanks to bargain pricing. For $95, it offers homeowners a system that includes a control panel, a battery backup in case of a power failure, window and door contacts, and a motion detector. Installation is included. For an additional monthly fee of $24.95, the system is linked to a central command station in Dallas. If an alarm is tripped, Westinghouse will alert the local police department or fire department. The company currently serves 200,000 homes, with an additional 8,000 signing on every month.

Still, the competition is fierce. Rivals say Westinghouse's basic $95 package is essentially a loss leader that lets the company hold on to market share in the face of a flood of new competitors. "You're losing money when you sell that system," says Steve Arnholt, director of home automation for Honeywell Inc., a close competitor. Westinghouse denies that it's losing money on the package.

Linder acknowledges that it will be a while before Westinghouse's push into law enforcement and security generates meaningful results. Still, he says he wants half of the defense unit's revenues to come from the civilian sector by 1995, compared with 30% today. Westinghouse is also pursuing other nonmilitary projects. It's working with Chrysler Corp. to develop electric vehicles and is building cellular and satellite phone systems for such customers as McCaw Cellular Communications Inc. Over the long haul, though, Westinghouse is betting that the big profit growth for its defense unit will come from fighting the enemy within, not the enemy without.

By Stephen Baker in Baltimore

...CAN BOOST SALES AT ITS DEFENSE UNIT



DATA: BUSINESS WEEK, NATWEST SECURITIES CORP.

PHOTOGRAPH BY KATHERINE LAMBERT; INSET BY RAY VELLA, BW

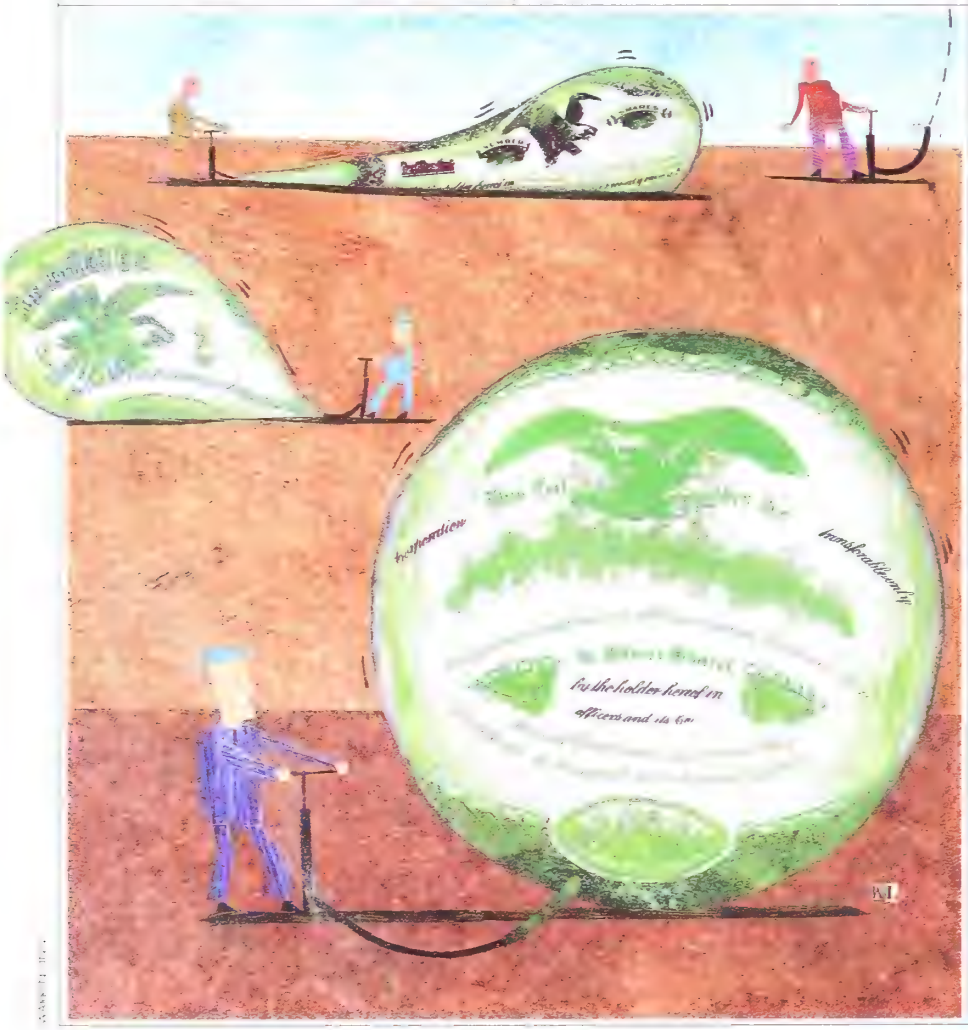
HOW TO FIGURE OUT WHAT'S HOT AND WHAT'S HYPE

Homework is still a small-cap stockpicker's best friend, but these red flags can save time and mo

Movie companies have long been prone to hyperbole, but even by Tinseltown standards, First National Film Corp. really outdid itself. In April, a month before the release of *Happily Ever After*, promoted as a sequel to Walt Disney Co.'s *Snow White and the Seven Dwarfs*, a spokesman told the news media that it would gross $30 million to $50 million. Anticipating a hit, investors sent the stock soaring from 4½ in March to more than 9½.

But *Happily Ever After* bombed. The film got poor reviews and has taken in little more than $3 million. First National refuses to answer questions about the movie or the projections. Meanwhile, investors who bought into its promotions are holding the bag: The stock now trades at less than 2.

First National's rise and fall is no isolated case. Hype is running rampant on Wall Street these days as small-company stocks boom and investors hunger to latch on to the next Microsoft Corp. or Home Depot Inc. "This is one of those times in the market that is filled with bubbles and manias," says David W. Tice, a Dallas CPA and analyst whose *Behind the Numbers* reports often attempt to burst those bubbles.



Of course, the stock market's game is making judgments abou earnings potential of public comp And judgments are subjective: On son's hope is another's hype.

Hype may come from the compa it did from First Nationa Film. But securities firms and the analysts have been known to whip frenzy about a company with arm dialing-for-dollars stockbrokers. promoters may make statements ab company that are wrong, but regu at the Securities & Exchange Co sion say companies aren't under ar ligation to correct them. In the en best way for investors to protect selves from hype is to know the s

■ **The great idea.** Much of the ho right now is in casino stocks. C Magic Corp., which runs Mississip erboat casinos, announced on Jun proposal for a riverboat casino Buffalo. Sounds like a moneymake cept for one thing: Riverboat gam isn't legal in New York State. The pany knows that, of course, but s has had discussions with state lead hopes of changing the law. The gained by 18% in the week afte announcement. "When you're inve in an idea rather than a real produ real service, you can get in trou warns Roger B. McNamee, general ner of Integral Capital Partners.

■ **The hot stock group.** While char corporate strategy isn't uncommon fact that a company chooses a industry should raise red flags. should investors think a manage will succeed in an industry they nothing about?" asks Robert S. N editor of the newsletter *Standa Poor's Emerging & Special Situa*

Just look at Skylink America I tiny cable TV company with less th million in revenues. On June 14, Sk said it would enter the gaming bus by combining operations with a priv held company that had an applicati a riverboat casino in St. Charles P La. The stock, which hadn't t

2 since 1987, ran up from less 1 to more than 5 in the next four On June 18, the Louisiana applica- vas granted, and stock is now at 7. ompany plans to use a casino man- ent firm to run the gambling unit.

company promotion. First Pacific orks Inc. in Sunnyvale, Calif., is oping devices that combine video, one, and data signals on one wire. Pacific has also developed a repu- —which company officials insist is —as a self-promoter after two in- s earlier this year. In one, a staff- ld a wire-service reporter that a venture with Southern Co., a major ic utility, could generate annual ues of $1 billion. The stock shot up than five points, to 26½. The next he company disavowed the projec- and the stock gave back the gain. that's not all. Around the same CNBC canceled an infomercial, fea- turing First Pacific and two others, that was or- ganized by Josephthal, Lyon & Ross Inc. and produced by an indepen- dent production compa- ny. "The program bor- dered on touting," says Brian Lewis, a CNBC resident. For instance, he says, stock symbol was in the upper right corner of the screen the whole

stock, though down from its , still trades at 17¾—which gives rket value of $319 million to a com- with less than $3 million in sales. Financial Officer Ken Schneider s that's a high valuation, but likens o a biotech company in which to- investors are paying for tomor- revenue and earnings. But Tice, *Behind the Numbers* man, thinks tock is still overpriced.

aggressive analyst. Sometimes, s soar when they're recommended well-known research analyst. That's happened when Immune Response doubled in the weeks leading up to Ninth International Conference on in early June, where the biotech any presented its research on a peutic vaccine. The stock collapsed the report disappointed investors, now, Immune Response trades at down from 27¼ on June 1.

estors familiar with the company San Francisco analysts R. Brandon of Montgomery Securities and J. Simon of Robertson, Stephens & were aggressively recommending stock while the company stayed in the weeks leading up to the rence. Fradd says Immune Re- e's test results didn't disappoint and they don't preclude an acceler- approval from the Food & Drug Administration for AIDS therapy. "If saying there's a possibility of a cure for AIDS is hype, then I'm guilty," says Fradd. "But it's a free market, and everybody can vote with their money."

Analyst Simon says he recommended Immune Response at 15 on May 14 for investors who could stomach the risk. He figured the stock could double if the research came in as he expected—or drop five to seven points if it were a complete failure. He thinks the company's AIDS research is good, "but by the time the stock hit 25, investors were already expecting a cure."

Although many companies and investors consider short-sellers the dregs of Wall Street, they in fact perform a service. Short-sellers hunt down hyped stocks and try to deflate them. They borrow shares of target companies, sell them, and plan to replace them when the stock price falls. A large short interest, which is reported monthly, may signal that a company's stock has been hyped.

But with many small companies, selling short isn't easy. Large blocks of these stocks are often in the hands of company insiders, who don't make them available for shorts to borrow. And if a short can borrow shares, the owner can call them back anytime, forcing the short to bid up the stock price in order to replace them. That's what's known as a "short squeeze."

Of course, nothing deflates hype like old-fashioned homework. Investors burned in First National Film might have been spared if they had done a little research on Hollywood: Only one in three films even breaks $10 million, and kiddie films really have a hard time because much of the take is in half-price children's tickets. The moral: Those who see through hype live happily ever after.

By Jeffrey M. Laderman in New York

MARKETS & INVESTMENTS

PRU SECURITIES: WHAT THE SCANDAL MAY COST

CEO Simmons estimates $200 million—but it could go higher

Hardwick Simmons hardly looked like someone facing what could be a hit of hundreds of millions of dollars. In a rare interview, the chief executive officer of Prudential Securities Inc. seemed surprisingly relaxed and optimistic about the continuing fallout from the firm's sale of $6 billion in limited-partnership interests during the early and mid-1980s. Many of those investments went sour, setting off an avalanche of customer lawsuits. Following a BUSINESS WEEK cover story on Mar. 4, 1991, the Securities & Exchange Commission, the National Association of Securities Dealers, and several state securities regulators began probes of allegations ranging from misleading sales practices to outright fraud.

Simmons, who replaced George L. Ball as CEO in May, 1991, acknowledges that the impact on the firm has been significant and that recruiting new brokers has been tougher in recent months. But he maintains that Pru Securities, which has consistently denied any wrongdoing, is close to putting the limited-partnership episode behind it. "What you're seeing is a very solid company performing very well in the markets," says Simmons. Before taxes and reserves, "we're doing as well as anyone in the securities business," with a return on equity of 20% even after litigation reserves, he says.

Simmons uses the same "rotten apple" defense that Salomon Inc. did during the Treasury-bond market scandal and brushes aside any notion that Pru Securities' problems are systemic. "Ninety-nine percent of Pru Securities'

employees did their jobs exactly as they should have," he says, "but there was always that 1% back then that created a problem."

The firm, Simmons continues, is within "several months" of reaching a settlement with the SEC and state regulators involving a payment of what he says is about $200 million. "It's all a fluid situation," he adds. That could come on top of $400 million that Pru Securities has already put aside as reserves against investor-litigation settlements and legal fees. It may also have to pay additional amounts to settle hundreds of millions of dollars of remaining investor claims.

"WE'RE DOING AS WELL AS ANYONE IN THE SECURITIES BUSINESS," SAYS SIMMONS

The reserves have taken a huge bite out of the firm's profits (chart, page 87).

But Simmons' optimism apparently is not shared by some regulators. A regulatory source familiar with the negotiations says a $200 million settlement offer from Pru Securities was rejected by SEC enforcement chief William R. McLucas at a meeting in Washington on June 18. It's not clear how much more the SEC is seeking, but the source says state regulators are pressing for a much larger settlement—perhaps, claims the source, in the range of the record $650 million fine paid by Drexel Burnham Lambert Inc. in 1988, when it pled guilty to felony charges. McLucas refused to discuss Pru Securities, saying he is barred by law from even confirming the existence of an investigation.

Representing the brokerage firm at the SEC meeting were General Counsel Loren Schechter; Deputy General Counsel Patrick Finley; and two of the firm's outside lawyers. Schechter and Finley were the firm's top legal officers during George Ball's tenure, and their presence during the current negotiations raised some regulators' eyebrows. "One has to wonder why those two are still involved," says one regulator.

Simmons defends Schechter and Finley's role. "I don't feel [they] have been compromised in any way," he says, indicating that Schechter has the full backing of Pru Securities' parent, Prudential Insurance Co. of America. Schechter reports to James R. Gillen, the general counsel of Prudential Insurance, as well as to Simmons. Schechter and Finley declined comment.

Meanwhile, Pru Securities has been trying to settle its biggest outstanding class action, involving $1.4 billion worth of Prudential-Bache Energy Income funds. As an interim step, the firm has reached an agreement to sell most of the oil and gas assets of those funds to Parker & Parsley Petroleum Co. for about $508 million in cash, with $491 million to be distributed to limited-partnership owners.

But not enough of the limited partners have tendered their partnership interests to Parker & Parsley to complete the deal. So the tender offer cutoff date has been extended to July 2. In the meantime, Pru Securities has not yet settled the underlying class-action involving the energy funds. A federal judge in New Orleans rejected Pru's $37 million in February.

The firm also faces a criminal i gation launched in the past month U. S. Attorney's office for the So District of New York. This i comes in the wake of a May 2 *York Times* story that attribute unsavory sales practices to J. Fr Storaska, a Dallas Pru Securities broker. "My client certainly has no anything inappropriate," says Stor attorney.

Simmons confirms that the U. torney's office is looking into alleg of wrongdoing at Pru Securities' office. But he brushes off concern the new investigation could sink ar settlement with the SEC and state r tors. No one at Pru Securities has subpoenaed, he says. And he mai that the U. S. Attorney's office w come up with anything that th hasn't already uncovered. "What t looking at is the subject of previo inquiries," says Simmons.

LONG MEMORIES. Some Wall Stree lysts say the episode has had a de ing impact on Pru Securities' repu despite the firm's strong profits the same as when Hutton was c for mail fraud. You don't live it d says Perrin Long, research direc First of Michigan Corp. "A cus never forgets a brokerage firm causes him grief."

But that has been offset by th turnover of brokers and custom Pru Securities. The firm has ba replaced the customers it sold the ed partnerships to with new ones. 1980s, some 40% of the firm's owned limited partnerships. That ber fell to 12% by 1991, says Sim mainly because of the flight of di tled customers and the high turno brokers, who traditionally take the tomers with them.

At the same time, the firm h creased its customer accounts fro million five years ago to 2.5 milli day. Simmons says his army of brokers is opening about 30,000 ne counts a month. "If the bad news silver lining, it was that there wer er disappointed limited-partnership ers remaining with us," he says.

That's little solace to the thousa investors who by some estimate hundreds of millions of dollars i partnership fiasco. Simmons insist he's "building a squeaky-clean firm has one primary motive, which serve its clients." But it could cos siderably more than he expects to up the mess.

By Leah Nathans Spiro in New and Chuck Hawkins in Atlanta

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MARKETS & INVESTMENTS

LITTLE AIRLINES, BIG OPPORTUNITIES?

Regional carriers look like a hot stock group for the '90s

Mention airlines these days, and most investors blanch. Every time the stocks of these beleaguered carriers begin edging up, some piece of disappointing economic news sends them tumbling. But while the big carriers suffer, a group of smaller, regional carriers and niche players is flying high. Over the past 18 months, the stocks of these airlines have soared 150%, vs. a 9% gain for the Standard & Poor's 500-stock index. And one company, a niche jet carrier, Reno Air Inc., saw its shares appreciate nearly tenfold in a 10-month period.

Regionals will be one of the hot stock groups of the 1990s, say analysts. And for a good reason: These airlines know how to make money. While major carriers have collectively lost $10 billion since 1990, many of the smaller, regional airlines are racking up earnings gains of 20% and more a year.

Why are they so profitable while the majors keep getting pummeled? For one thing, regional airlines have lower cost structures—primarily because their workers often earn one-third what their counterparts do at the majors. Second, these airlines, which restrict flying to short-haul routes and then feed passengers into larger carriers, handle a much greater percentage of higher-paying business travelers than do larger airlines. The regionals also have limited competition on many routes, allowing them to keep fares up.

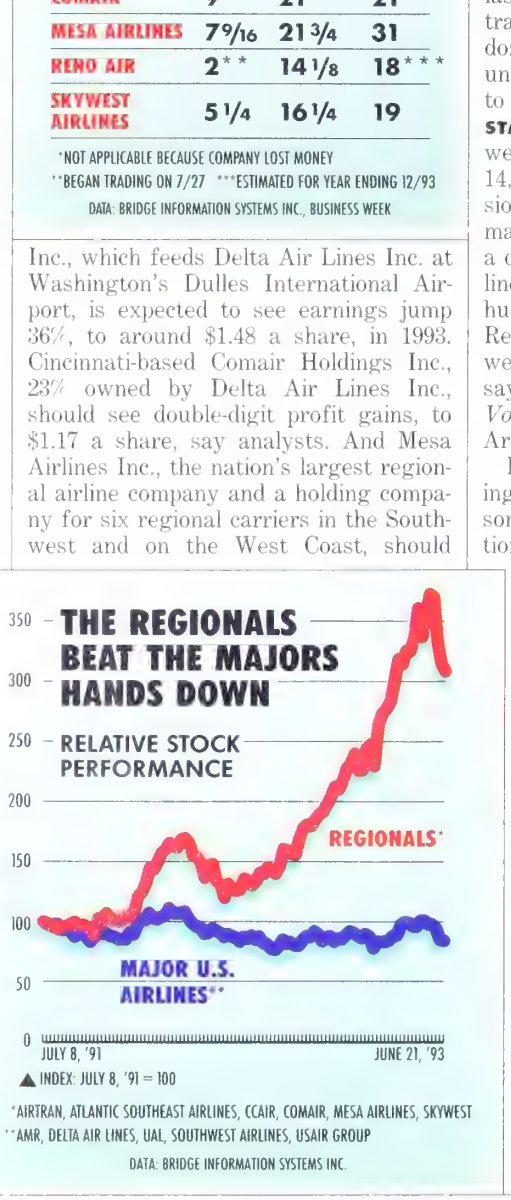
NIMBLE BUNCH. Moreover, prospects continue to brighten as struggling major carriers increasingly turn over unprofitable routes to these nimbler partners. "There's a real, long-term case to be made for regional airline stocks," says Kidder, Peabody & Co. analyst Samuel Buttrick.

Buttrick cautions that the wild inflation of price-to-earnings ratios over the past year won't persist. While investors could buy regional airline stocks at 10 times earnings four years ago, p-e ratios have shot up to 20 and higher in the last year. But even if those ratios come down a bit, stock prices can keep rising on the strength of accelerating earnings. Atlantic Southeast Airlines Inc., which feeds Delta Air Lines Inc. at Washington's Dulles International Airport, is expected to see earnings jump 36%, to around $1.48 a share, in 1993. Cincinnati-based Comair Holdings Inc., 23% owned by Delta Air Lines Inc., should see double-digit profit gains, to $1.17 a share, say analysts. And Mesa Airlines Inc., the nation's largest regional airline company and a holding company for six regional carriers in the Southwest and on the West Coast, should double profits, to 97¢ a share, this

THE SMALL HIGH-FLYERS

AIRLINE	STOCK PRICE 6/22/92	STOCK PRICE 6/23/93	P-E RATIO
ATLANTIC SOUTHEAST AIRLINES	13 1/8	30	29
AIRTRAN	6	9 1/2	12
CCAIR	5	8 7/8	NA*
COMAIR	9	21	21
MESA AIRLINES	7 9/16	21 3/4	31
RENO AIR	2**	14 1/8	18***
SKYWEST AIRLINES	5 1/4	16 1/4	19

*NOT APPLICABLE BECAUSE COMPANY LOST MONEY
**BEGAN TRADING ON 7/27 ***ESTIMATED FOR YEAR ENDING 12/93
DATA: BRIDGE INFORMATION SYSTEMS INC., BUSINESS WEEK



Investor appetite for the upstar gional carriers will be tested w weeks. Atlantic Coast Airlines, a U Airlines Inc. affiliate, is gearing up public. The carrier, started in 1989 56 planes and feeds traffic into Unit Dulles. In April, it added limited se in Florida. Analyst William Wrights Alex. Brown & Sons Inc., which wi derwrite the offering, won't comme Atlantic Coast specifically but "We're very bullish on the indu Yields [money collected per seat] fo gionals are strong, and their fu looks good."

Small carriers that fall outside bounds of traditional regional air because they sometimes fly long also show strong prospects. Just lo 11-month old Reno Air. That carrie gan flying a single jet out of Reno, last July. But a powerful receptio travelers helped the airline grow dozen planes and seven destinatio under a year. The stock climbed fr to a high of 20.

STARTUP SEARCHERS. True, in re weeks, Reno's stock has dropped ba 14, reflecting concerns about overex sion, which has been the downfa many carriers. In May, the airline si a deal to operate some of American lines Inc.'s routes out of the big carr hub in San Jose, Calif.—which Reno in direct competition with So west Airlines Co. "I like the stock at says Mark Leibovit, publisher of *Volume Reversal Survey*, in Sec Ariz.

Investment bankers are now sc ing to find new Renos. Robert W. son, president of startup Kiwi Int tional Air Lines in Newark, N. J., bankers call him regularly to t interest him in tapping the p markets for capital. A year Wall Street wouldn't go near his line, and Iverson had to raise m from Kiwi's pilots to get off ground. Now, Iverson, whose ai flies to Chicago, Orlando, Tam and soon San Juan—says it is templating a public offering.

Of course, investing in reg airlines or startups still pres risks. As the major carriers se desperately for ways to shor revenues, some could push smaller partners into less attra revenue-sharing arrangements they had in the past. And con tion could heat up among reg carriers themselves. Still, the reward ratio points to regiona an enticing investment.

By Andrea Rothman in New with Seth Payne in Washington

Just don't expect it to roar.

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BY GENE G. MARCIAL

GENTEX: ITS SAFETY MIRROR MOVES IT INTO THE FAST LANE

Have you ever been blinded by the glare of bright lights from behind when driving at night? If you have, you'll like what Gentex has developed: A rearview mirror for cars and trucks that automatically darkens to reduce the glare from headlights. Some smart-money pros have been quick to see the need for Gentex' patented product and have been scooping up its shares.

Sure, the stock has climbed from 9 a share in late December to 21¾ on June 22. But these pros believe Gentex' stock is far from hitting the ceiling, and they say that another big upswing is in the works.

"Gentex is the industry's big sleeper, and with its 40% annual growth rate, the stock should double over the next 18 months," says one New York money manager. Jean-Claude Gruet, automotive analyst at UBS Securities, a subsidiary of Union Bank of Switzerland, is also high on Gentex. "It's a pure play in what we consider one of the most promising growth segments of the auto industry for the next decade."

Marketed under the name Night Vision Safety Mirror, Gentex' product has caught the eye of Detroit because it enhances driver safety. The mirrors are already offered as standard or optional equipment on 57 upscale domestic and foreign cars, including Mercedes-Benz, Rolls-Royce, BMW, Cadillac, Lincoln, and Infinity.

'BRIGHT PROSPECTS.' On June 22, Chrysler signed a contract to buy Gentex' mirrors for its 1994 Dodge Dakota midsize pickup trucks and the new full-size Ram pickup trucks. The mirrors will also be offered as standard or optional equipment on several other Chrysler models such as the 1994 LH passenger cars and several Jeep models, including the Grand Cherokee.

"The latest Chrysler contract validates the bright prospects for Gentex," says Gruet. The next major order, he adds, may come from Toyota Motor for its Lexus LS 400—the rival to Nissan's Infinity Q45, which uses the product.

The mirror's penetration in the auto market is still under 10%, notes Gruet. He expects Gentex to soon go after the minivan and midsize-car markets. Gruet projects shipments jumping

from 1.2 million this year to 1.55 million units in 1994 and 2 million in 1995. Gruet sees the debt-free company earning 55¢ in 1993, 75¢ in 1994, and $1 in 1995. It earned 32¢ in 1992.

Last April, Gentex won a suit against Donnelly Corp. barring the latter from infringing on Gentex' patent on the rearview mirrors.

THIS PUBLISHER GETS RAVE REVIEWS

With the book publishing industry currently in a consolidating mode, the pickings have become quite cheap for deep-pocketed giants looking for buyouts. Even the nation's largest publisher of children's books, Western Publishing Group—often rumored to be a target—has become cheap as its stock fell to 15 on June 22 from 23 in December.

"The company was an attractive target a year ago when its stock was flying high, so it's an even better buy at its current price and market cap of just $315 million," says investment manager Jim Awad, who figures the stock is worth 30 in a buyout.

Awad sees earnings jumping to $1.30 a share in 1994 from an estimated 90¢ this year. "So, as the stock has dropped, earnings have shown signs of rebounding," he notes. Awad suspects this situation has rekindled interest in Western among the same group eyeing the company a year ago, which he believes included Paramount Communications, Time Warner, Walt Disney, and Germany's Tengelmann.

Western, known for its Golden Books trademark, disappointed the Street last year with lower-than-ex ed earnings, prompting many inves to bail out of the stock.

Analyst John Mahoney of Rayn James & Associates says that Western's distribution network, franchise value of its products ar censes, and the expected impr growth rate, "the stock is substant undervalued." He says Western's chise and distribution network wi almost impossible to duplicate wit 2,500 book titles, 125,000 retail out and 1.5 billion Golden Books sold i past 50 years. "The Golden nam perhaps the most widely recogr and valuable franchise in publishi

A HOT RECYCLER IS TURNING HEADS

In just three months, plastics cycler Pure Tech International acquired three companies, dou its revenues to $70 million, and ne tripled earnings. Little wonder, that its stock, trading at 8 a shar December, has raced up to 17⅛ June 22. "That's not the end of acquisitions—or the rise in the sto says Len Bogner, an analyst at dential Securities.

But the exciting news for some is the prospect of Pure Tech becor a buyout target. Speculation swirled of late that a chemical and a major consumer-products co ny have been talking separatel Pure Tech executives for a pos buyout bid. Chairman Simon Sinn wasn't available for comment. money manager believes the com has a takeover value of 30 to share. Bogner expects Pure T which recycles containers made of tic, glass, aluminum, and steel, to n at least one more acquisition that lift revenues to at least $100 millio 1995 and kick up earnings to $2 a s in the year ending June 30, 1995, an estimated $1.25 in fiscal 1994, 48¢ in fiscal 1993.

Joe Salvani, president of Salvan vestments, is more optimistic in hi timates: $1.50 in 1994 and $2.50 in The reason, he says, is that the acq tions will enable Pure Tech to dive into engineering plastics faster.

One of its recent purchases, St Industries, makes custom desig molded thermoplastic parts used i manufacture and assembly of a va of business and consumer goods such companies as IBM, Magic and Black & Decker.

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'SHIPWRECKS AND DISASTERS'

As Europe and Japan struggle, big banks are reeling

During a luncheon a few weeks ago for the chairmen of the world's 100 biggest banks, Swedish Finance Minister Anne Wibble broke up the crowd at Stockholm's Grand Hotel when she suggested how they could help her government bail out the country's ailing lenders. "If you want to buy a bank, or part of one," she said as the bankers tucked into their strawberry mousse, "don't hesitate to do so."

With most Swedish banks now on a heavy diet of government aid to help them through a severe economic slump and a real estate collapse, the chairmen didn't exactly rush to the podium to take advantage of Wibble's offer. Still, Sweden is hardly the only European government trying to unload big banks these days. Italy is planning to sell three mammoth state-controlled lenders that account for $900 billion in assets. France's new Conservative Prime Minister, Edouard Balladur, is also selling three, including loss-plagued Crédit Lyonnais. Portugal and Norway hope to launch privatizations.

STILL STRUGGLING. But this is hardly the time to put banks on the block. As BUSINESS WEEK's 1993 International Bank Scoreboard indicates, hard times are continuing to dog many of the world's top 50 lenders. Across much of the industrialized world, banks are still struggling with recession, rising losses, and diminishing capital. "We're seeing shipwrecks and disasters," says Robin Monro-Davies, managing director of the British credit-rating agency IBCA Ltd., which compiles the Scoreboard.

Not everything is bleak. Booming Asian economies and low British and U.S. interest rates are buoying hsbc Holdings. It owns Hongkong & Shanghai and Britain's Midland and America's Marine Midland banks. Indeed, once-beleaguered U.S. banks are making a stunning comeback on the heels of low interest rates, massive cost cuts, and a wave of mergers. But from there, things go downhill. Japanese and Continental European lenders, for example, "had awful figures for 1992," says Monro-Davies, "and 1993 is probably going to be worse." Indeed, few come close to the misery being experienced by Japanese banks. They remain the world's largest, with the top 10 accounting for some $4 trillion in assets. But the deflating Japanese asset bubble has left them with a massive bad-debt problem that may linger for much of the decade.

In the fiscal year ended Mar. 31, Japanese lenders posted double-digit drops after provisions for losses on billion in nonperforming loans. But are also keeping thousands of tr borrowers afloat by lending them sums—at little or no interest. Inc these cut-rate "structured loans," dustry's problem debts could excee billion. "We're still in a difficult p concedes Bank of Tokyo Chairman Gyohten.

The Japanese are trying t through this rough stretch by dis of assets overseas. During 1992, a ing to the Bank for International ments (BIS), Japanese banks re their overseas loans by 7%, to $8 lion. With as much as $100 bill problem U.S. real estate loans, nese lenders have begun foreclos American properties. At home, while, regulators are helping c keeping interest rates low and out troubled small lenders.

"APPALLING" AMOUNT. While the nese struggle, European lenders a ing to shake off the effects of a de cession. Germany's slump is pro an unpleasant crop of corporate an estate loan losses. Finland is sp $7.5 billion to bail out its troubled b an "appalling" amount, says Pre Maunio Koivisto. And then there's where big corporate borrowers are the skids. The most spectacular down has been that of the Ferruzz ly empire, which is unable to serv billion in bank borrowings.

If Italy is turning into bankers the U.S. has become a lenders' na—and BUSINESS WEEK's index o profitability" shows just how good have become. Country-to-country ences in capital standards and ta inflation rates make some banks to be more profitable than they are. So we adjust lenders' returns uity to account for these factors. I yardstick, America's NationsBan BankAmerica are among the leade

Credit for the strong U.S. re goes in large part to the Feder serve, which has slashed the di rate by 3.5 percentage points since That fact isn't lost on bankers in countries who are still struggling a tight money. As the sluggish world omy prompts more countries to rates down, banks will start to r Whether they take full advantage to privatize, cut costs, and boost e cy is another question. But th things are going in global banking may have little choice.

By William Glasgall in New Yo Bill Javetski in Stockholm, with reports

JAPAN LEADS IN SIZE...

	Assets/Billions
DAI-ICHI KANGYO BANK	$456.5
FUJI BANK	454.7
SUMITOMO BANK	448.9
SANWA BANK	445.9
SAKURA BANK	438.6

...AND MARKET VALUE...

	Billions
MITSUBISHI BANK	$72.4
SUMITOMO BANK	66.0
INDUSTRIAL BANK OF JAPAN	63.2
SANWA BANK	61.2
FUJI BANK	60.5

...BUT NOT PROFITS...

		Total profitability index*
HSBC HOLDINGS	Britain	1.226
NATIONSBANK	U.S.	1.195
BANKAMERICA	U.S.	1.182
CHEMICAL BANKING	U.S.	1.142
BANK OF CHINA	China	1.117

*Based on return on equity, adjusted for differing capital ratios, inflation, and tax rates. Industry average=1.016.

...OR CAPITAL

		Total capital ratio*/Percent
HSBC HOLDINGS	Britain	12.30%
NATIONSBANK	U.S.	11.52
SWISS BANK	Switzerland	11.50
BANKAMERICA	U.S.	11.49
CHEMICAL BANKING	U.S.	11.29

*Ratio of capital to assets, adjusted for risk and off-balance-sheet items

INTERNATIONAL BANK SCOREBOARD

		ASSETS		CAPITAL		PERFORMANCE				MARKET VALUE		
		$ MIL	CHANGE FROM 1991 %	EQUITY $ MIL.	TOTAL CAPITAL RATIO	NET INCOME $ MIL.	CHANGE FROM 1991 %	RETURN ON EQUITY %	REAL PROFIT-ABILITY	5/31/93 $ MIL.	MARKET TO BOOK RATIO	P/E RATIO
-ICHI KANGYO BANK	Japan	456,484	−10.5	17,744	9.37	465	−40.9	2.63	1.010	57,672	3.1	132.9
I BANK	Japan	454,745	−5.2	17,187	9.27	523	−36.0	3.08	1.014	60,813	3.3	111.8
MITOMO BANK	Japan	448,933	−8.2	19,525	9.37	199	−80.9	1.01	0.994	65,970	3.1	335.3
WA BANK	Japan	445,918	−5.4	17,149	9.43	818	−11.0	4.86	1.030	61,189	3.4	68.9
URA BANK	Japan	437,952	−9.0	15,608	8.96	557	−20.0	3.60	1.018	49,493	3.1	91.8
SUBISHI BANK	Japan	424,348	−7.4	15,391	9.12	540	1.1	3.54	1.018	73,564	4.5	101.4
RINCHUKIN BANK	Japan	368,544	4.9	2,578	NA	370	6.2	15.55	1.029	NT		
DIT LYONNAIS	France	352,013	22.1	11,259	8.20	−139	NM	−1.37	0.979	4,445	0.6	NM
USTRIAL BANK OF JAPAN	Japan	336,233	−2.9	12,052	8.88	356	−30.5	2.97	1.013	63,215	4.9	167.3
TSCHE BANK	Germany	302,030	11.3	11,806	9.50	1,134	29.8	10.03	1.060	19,729	1.7	NA
DIT AGRICOLE	France	299,231	3.5	15,579	9.10	1,058	10.3	7.12	1.059	NT		
QUE NATIONALE DE PARIS	France	284,795	9.7	9,314	8.70	434	−30.2	4.78	1.027	NT		
G-TERM CREDIT BANK OF JAPAN	Japan	271,688	−1.3	9,434	9.10	202	−62.8	2.15	1.006	22,336	2.3	103.0
AI BANK	Japan	270,592	−6.3	9,365	8.97	217	−50.5	2.33	1.007	24,238	2.4	50.9
C HOLDINGS	Britain	258,011	98.7	14,191	12.30	2,160	NM	19.10	1.226	23,782	1.9	10.0
IETE GENERALE	France	257,862	16.8	7,772	9.12	645	−3.6	9.07	1.058	8,865	1.2	14.6
-AMRO HOLDING	Netherlands	253,529	10.9	9,397	NA	946	10.1	10.40	1.072	8,102	1.0	9.5
HI BANK	Japan	233,263	−4.1	9,100	9.23	310	−4.7	3.44	1.018	26,856	2.7	79.7
RCLAYS	Britain	222,784	6.6	9,025	9.10	−431	NM	−4.65	0.923	11,540	1.4	NM
K OF TOKYO	Japan	220,956	−11.7	8,986	9.61	361	−4.8	4.05	1.023	26,483	2.9	75.0
IONAL WESTMINSTER BANK	Britain	216,787	16.8	8,599	9.80	359	NM	4.17	1.015	11,944	1.5	38.7
ICORP	U. S.	213,701	−1.5	11,181	9.60	722	NM	6.99	1.046	9,868	1.0	16.9
SUBISHI TRUST & BANKING	Japan	209,032	−5.8	7,460	9.77	238	−21.1	3.22	1.015	15,559	1.9	60.2
RIBAS	France	203,900	8.5	9,987	9.00	402	NM	3.94	1.019	6,538	0.9	39.7
ESDNER BANK	Germany	199,516	12.1	6,318	NA	598	48.1	9.63	1.047	9,401	1.4	NA
K OF CHINA	China	197,301	28.1	10,995	NA	1,779	22.8	17.54	1.117	NT		
MITOMO TRUST & BANKING	Japan	195,911	−3.8	7,312	10.02	213	−23.2	2.94	1.013	15,088	1.9	65.0
TSUI TRUST & BANKING	Japan	187,127	−3.0	5,922	10.22	85	−60.1	1.44	1.001	11,520	1.8	137.7
ION BANK OF SWITZERLAND	Switzerland	180,768	6.9	12,888	10.00	934	10.2	7.41	1.075	16,629	1.3	17.4
NKAMERICA	U. S.	180,646	56.4	15,488	11.49	1,492	32.8	12.67	1.182	15,195	1.4	10.6
STDEUTSCHE LANDESBANK	Germany	164,385	19.3	6,940	8.90	145	4.0	2.87	0.993	NT		
UPPO BANCARIO SAN PAOLO	Italy	161,359	15.8	6,763	NA	205	−66.1	3.37	0.986	4,596	NA	13.5
ERISCHE VEREINSBANK	Germany	153,192	10.7	4,022	9.30	278	22.0	7.27	1.022	5,186	1.5	NA
WA BANK	Japan	152,315	−6.2	5,308	9.37	159	−41.5	3.02	1.013	15,711	2.8	92.9
PPON CREDIT BANK	Japan	147,495	−3.7	4,869	9.00	163	−54.3	3.40	1.016	9,881	1.9	57.6
MMERZBANK	Germany	141,803	2.9	4,390	8.34	519	53.1	12.06	1.062	5,130	1.1	NA
EMICAL BANKING	U. S.	139,655	0.5	9,851	11.29	1,086	NM	12.68	1.142	9,471	1.2	9.3
OKO CHUKIN BANK	Japan	137,793	4.0	3,740	NA	165	−30.7	4.59	1.022	NT		
ISS BANK CORP.	Switzerland	137,764	−2.9	9,167	11.50	695	−6.1	7.66	1.071	9,193	1.1	13.0
SUDA TRUST & BANKING	Japan	135,976	−8.7	4,749	10.26	74	−62.9	1.56	1.001	9,401	1.8	116.8
PO-BANK	Germany	134,116	13.7	3,618	8.10	231	3.4	7.01	1.020	NT		
BOBANK	Netherlands	128,166	7.2	7,754	NA	565	0.9	7.56	1.067	NT		
BANK	Germany	128,120	3.3	3,672	8.90	53	−69.7	1.58	0.986	NT		
O TRUST & BANKING	Japan	126,933	0.8	4,091	9.79	102	−34.3	2.52	1.009	9,171	2.1	82.8
SHINREN BANK	Japan	119,880	7.5	2,134	NA	127	6.5	6.13	1.024	NA		
ERISCHE LANDESBANK	Germany	119,656	15.6	2,593	NA	271	49.9	11.26	1.039	NT		
TIONSBANK	U. S.	118,059	7.0	7,814	11.52	1,145	NM	15.98	1.195	11,923	1.5	10.7
EDIT SUISSE †	Switzerland	117,946	11.2	6,641	9.60	655	2.1	10.19	1.097	10,276	1.5	14.4
TL. NEDERLANDEN BANK	Netherlands	109,541	8.6	3,835	NA	388	4.0	10.62	1.069	9,607	1.1	10.2
NCA NAZIONALE DEL LAVORO	Italy	108,980	13.3	4,550	NA	50	−14.1	1.11	0.961	NT		

data are for fiscal year ended Mar. 31, 1993. Data for all other banks are for fiscal year ended Dec. 31, 1992, unless otherwise designated. †Holding company data. NA = not available. NM = not mean- = not traded.

DATA: IBCA LTD.

AVIATION

BOEING: FOR WANT OF A PIN...

How one small, defective part caused deadly havoc

The sun was setting last Oct. 4 as El Al flight 1862 lifted off from Amsterdam's Schiphol Airport. As the Boeing 747 cargo plane climbed, the crew felt a powerful shudder. "We have a control problem," radioed Captain Isaac Fuchs, who couldn't see that the two right engines had snapped off. "Going down, 1862 going down, going down," were his last words to the tower. The plane slammed into two apartment buildings, killing the four-member crew and 39 people on the ground.

Back at Boeing Co. headquarters in Seattle, the circumstances were horrifyingly familiar. Just 10 months earlier, a China Airlines Ltd. 747 had crashed off Taiwan under similar circumstances, killing five. Both were cargo planes, which carry heavier loads than passenger jets. Boeing engineers had just figured out what happened in Taiwan—but hadn't fixed the problem in time to prevent the Holland crash. "Oh, my God, not again," one Boeing official who has since retired recalls thinking at the time.

On June 18, Boeing announced that exhaustive engineering work plus trillions of supercomputer calculations had finally produced a foolproof way to keep the 747's engines from falling off. Evidence points to the failure of a hollow steel "fuse pin," slightly smaller than a beer can, that attaches an engine to a wing. It's supposed to sever in a crash, but instead broke while planes were aloft. Boeing tried to fix the problem by introducing a new generation of fuse pins in 1980, but they, too, proved susceptible to failure. Now, the company is moving to a third generation of pins—plus an extra steel brace should they fail.

CLEAN BREAK. In Boeing's design, even the untimely breakage of a fuse pin never should have caused a 747 to crash. That's because the company assumed that even if the pins did break in flight, an engine would fall away cleanly and the plane would fly on the remaining three. Boeing engineers now realize that if one inboard engine breaks away, it can knock off the same wing's outboard engine—as happened in both Taiwan and the Netherlands. The design flaw is costing not just pride, but money. Boeing will spend roughly $200 million for parts alone, estimates Wolfgang Demisch of UBS Phillips & Drew brokerage in New

Boeing says th
day, all 948 of it
in service are sa
that all fuse pins
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frequently inspec
airlines. Still, the
tion arises: Wh
Boeing take so l
fix the problem-
cially when it h
ports of corrode
cracked fuse pin
ing back to 1979?
waited to act unt
were forced into
situation," says
Janssens, presid
the Aviation
Foundation, an ad
group based in
ington, Ohio.
Israel Airlines
claimed in Januar
Boeing's respons
"slow, weak, and
ing on negligence

Boeing says it
as quickly as po
while still being
ough. Indeed, co
officials say they
idea what really
wrong until July, 1992, when the
Airlines inboard engine was fou
the bottom of the sea, intact.

Its main defense, however, is
tricate nature of aircraft design,
makes crafting a solution espe
tricky. "In retrospect, we could
[done it faster], but it would have
a vision instead of a logical engin
approach," says M. Richard Jol
Boeing's director of engineering f
747 and 767. "Engineers are metho

From the day the 747 was conc

SEEKING A SOLUTION

1970
Boeing 747 goes into service and becomes a best-seller.

1979
Boeing receives reports of cracks in the fuse pins that attach engines to wings.

1980
Boeing creates a stronger pin, but some airlines opt to inspect old ones instead.

DEC. 29, 1991
China Airlines 747 freighter using the new pins crashes off Taiwan, killing five.

OCT. 4, 1992
El Al Israel Airlines cargo plane loses two engines and crashes into low-income housing near Amsterdam, killing 43 people.

JUNE 18, 1993
Boeing says it will ask airlines to install stronger engine mountings and install redesigned, stainless-steel fuse pins.

DATA: BUSINESS WEEK

lea of a plane going down with up 0 passengers has haunted Boeing. er Chairman William Allen, when what he would do if a 747 crashed, to say: "I'd rather talk about some- pleasant—like a nuclear war." But 47 has turned out to be one of the aircraft ever built. Based on their ience with other new planes, in- ce underwriters expected that would be at least three 747 crash- its first 18 months. Instead, there five fatal accidents in its first le—three blamed on pilot error. g's safety philosophy extended to gine mounts, which were designed afe separation." The fuse pins are sed to break under unusual stress. engine hits a building, a vehicle, or unway, it is supposed to separate ut rupturing fuel tanks inside the and thus avoid fires. From the n, all Boeing jets had breakaway es.

eing's chief rival, Europe's Airbus trie, never bought into breakaway es. If an Airbus lands, the plane even skid on its es without their off. "Our philos- is: Whatever ens, the engines strongly at- d," says an Air- fficial in Paris. In years, Boeing at began to ac- ledge a potential em. For its 757, and upcoming 777, g added a brace to he engine on in case fuse-pin failure in And it also used the in its newer 737-400. Boeing decided that the as safe without extra ng.

TCH. Still, the warnings there. In 1979, airlines reporting cracks and sion in the fuse pins. g engineers blamed on poor machining of ard-to-fabricate parts. e mid-1980s, cracks turned up in ew pins the company had switched oeing blamed that on an anticorro- compound that scraped off during ction. It still considered all this a . Although the Federal Aviation inistration ordered inspections, was no reason to suspect that the s and corrosion could lead to a , says Anthony J. Broderick, asso- FAA administrator for regulations ertification.

convinced was Boeing that the en- mount was safe that when the China Airlines flight went down, its engineers thought the fault was with the engines, not the mount. On that theory, engine maker Pratt & Whitney split the cost of the investigation. When the right inboard engine was recovered intact, it appeared instead that it had broken away and slammed into the outboard one, tearing it off the wing. Boeing knew it had to do something, so last Sept. 21 it invited representatives of all 82 airlines flying 747s to discuss the problem. The company recommended inspecting fuse pins for corrosion and announced it would be designing a simpler, corrosion-resistant pin. Unannounced, Boeing engineers were also working on a new backup brace to keep engines from falling off in flight.

Then disaster struck in Amsterdam. This time, Boeing quickly realized what the trouble was. Soon after, it and the FAA ordered all 747 operators to inspect engine mountings within 30 days and every 500 landings thereafter. Those inspections showed only a few cracked pins but corrosion on about 20% of all pins, far more than Boeing expected.

Bad pins may have been at fault again last March, when an Evergreen International Airlines Inc. 747 cargo flight headed for Chicago lost an engine after takeoff from Anchorage. Although the plane landed safely, a National Transportation Safety Board preliminary report released in May said turbulence may have put excessive loads on the engine mounts, which gave way.

The solution that Boeing has announced involves reinforcing the engine mount with a sturdy steel bracket shaped like an upside-down V, using stronger braces, and redesigning the fuse pins. The new pins are made of corrosion-resistant stainless steel instead of regular steel. Their walls are also thicker and stronger. The new fuse pins are already in production; the other parts should be ready early next year.

Airlines will have to share the cost of labor for the modifications, which could take up to three weeks per plane. Still, most are relieved to have a solution. Ever since the El Al crash, they've had to disrupt flight schedules to test fuse pins every four to six months. This doesn't coincide with regularly scheduled maintenance, and it requires costly, time-consuming ultrasound tests.

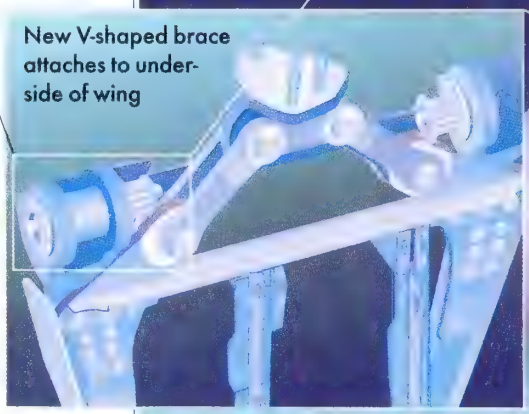
CLOSER LOOK. Boeing engineers say they've fixed the problem, thanks to techniques unknown even 10 years ago. The designers of the original 747 used a mathematical approach called finite-element analysis to model the stresses by dividing the complex wing into 10,000 parts. In their new investigation, using powerful supercomputers and software, engineers divided the fuse pin alone into 34,000 parts. Each simulation took 11 hours to complete. It showed that at several critical points within the pins, stresses during takeoff were far greater than expected.

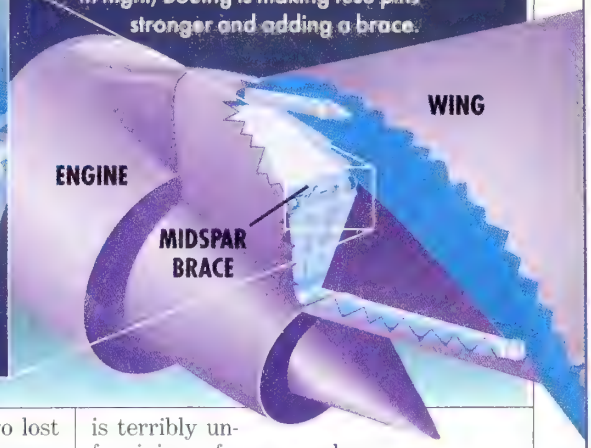
In Johnson's Boeing office is a photo of a crash site, overlaid with a quote he found somewhere once: "Aviation in itself is not inherently dangerous, but to an even greater degree than the sea, it is terribly unforgiving of any carelessness, incapacity, or neglect." That the failure of a 4-inch-long part can bring down a 200-ton airplane may be the ultimate in flight's unforgiving nature. Boeing can only be grateful that it apparently solved the mystery before a 747 full of passengers fell from the sky.

By Mark Lewyn in Washington and Dori Jones Yang in Everett, Wash., with Neal Sandler in Jerusalem and Stewart Toy in Paris

BOEING'S FIX FOR THE 747

Hollow fuse pins break in a crash so engines fall off cleanly. To keep engines from falling off in flight, Boeing is making fuse pins stronger and adding a brace.





ROB DOYLE/BW

Developments to Watch

EDITED BY OTIS PORT

SHINE AND RISE: HOW TO GET RID OF CHIP DUST

Will levitation be high tech's next marvel? Could be. But you'll have to look closely to see it. Radiance Services Co., a Bethesda (Md.) supplier to the semiconductor industry, is developing levitation mainly for lifting microdust off silicon wafers.

The circuit lines printed on chips are so small that microscopic dirt specks can be as obliterating as a landslide on a mountain road. Despite cleanliness procedures that make hospitals seem like pig pens, semiconductor plants often toss out 10% to 30% of their chips because of contamination. Part of the reason is that today's cleaning techniques generally miss particles smaller than 0.3 microns, says Radiance President Donna R. Fitzpatrick.

To avoid such defects, she suggests putting microdust under a spotlight. Hitting it with the right wavelength of laser light excites enough atoms to make the particles quiver and break loose. Then they're whisked away on a flow of inert gas. A demonstration line is being installed at the Defense Dept.'s Microelectronics Research Laboratory in Columbia, Md.

RATING R&D: HOW COMPANIES GET THE BIGGEST BANG FOR THE BUCK

In most companies, research and development funding seems to become especially vulnerable at the first sign of financial trouble. Largely that's because the value of R&D is hard to pin down. So Pittiglio Rabin Todd McGrath, a high-tech consulting company in Weston, Mass., is proposing a simple benchmark called the Index of R&D Effectiveness. It is calculated by dividing the percentage of total revenue spent on R&D into new-product profitability, which is also expressed as a percentage. PRTM recently applied this measure to 45 large electronics makers—with sobering results.

Just 9 of the 45 companies scored 1.0 or higher, indicating that only 20% enjoyed a positive payback on R&D. One reason that most companies missed breakeven: On average, they squandered 18% of R&D spending on products that never reached market. However, the top nine held such losses to 2.5% by running frequent checks on products vs. market opportunities—and canceling dogs quickly. They also got new products to market in half the time the others did, says PRTM Managing Director Michael E. McGrath. The bottom line: Revenue growth among the top 20% was double the average of all 45 companies.

CHEMICAL CASSEROLE, FRESH OUT OF THE MICROWAVE

Researchers at Harvard University have found a clever way to process exotic semiconductor materials. Graduate student Christopher C. Landry needed to prepare a mixture of copper, sulfur, and indium for a chemistry experiment last December. Rather than going through the usual hassle of co the ingredients in a pressurized furnace for 48 hour mixed them in a quartz tube and popped it into a lunch microwave oven. In seconds, Landry had enough mater complete the experiment.

Chemistry Professor Andrew R. Barron was so impr that he now whips out various hard-to-make semicond materials, including copper-indium-selinide, with a micro Using fine powders and mixing them thoroughly before ping them ensures uniform heating, he says. Moreove heating is so rapid that even heat-sensitive materials—su indium antimonide—can be made this way, rather than traditional manner, which uses tedious electrochemistry lia, a startup founded by Barron, is now exploring the nique's commercial potential.

BIOTECH'S ANSWER TO FLEAS: BOMB THEM WITH CREEPY-CRAWLIES

Poor Rover. Americans collar him, spray him, bathe powder him, and even flea-bomb the whole house—tune of nearly $1 billion every year. But there Rover scratch, scratch, scratch. Getting rid of fleas is especial ficult because their early life cycle takes place outdoors, is where flea eggs hatch. So, even after pet lovers kill th fleas on their dog or in the house, come the next hatc buggers are back.

Now, Biosys, a small Palo Alto (Calif.) biotechnology c ny, is going after fleas outdoors—but without using the chemicals that consumers often fear might harm childr pets. Using so-called beneficial nematodes, or tiny worr creatures that can invade a pest's body, Biosys is laur BioFlea. Sprayed in the backyard, the nematodes ente eggs and larvae, release a deadly bacteria, then eat the organism. Fleas can't become resistant, as they do to tra al chemicals, because there are no chemicals—just micr ic predators.

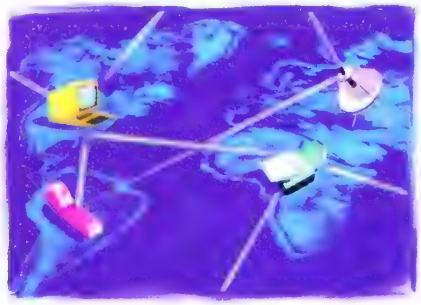
GRAPEVINES NEED A GENTLE TRIM? CALL ROBO-PRUNER

Tending a vineyard isn't just sunny-day work. Even before the snow melts in such grape belts as upstate New York, vines must be pruned to ensure an optimum harvest. It is the most labor-intensive vineyard chore—or will be until researchers at Cornell University finish their new robot.

Pruning vines has proved a tough job for robots. The vine has "tortuous bends and crooks," note nell professor emeritus of agricultural engineering W W. Gunkel, whose team has developed a sophisticated system. One video-camera eye nods up and down, while ond scans back and forth, to help a computer keep trin shears a safe distance from the main stalk. Although the hasn't ventured out yet, manufacturers are interested Gunkel—probably because 33 years ago, another Cornell uncorked the widely used mechanical grape harvester. the pruning robot will be mounted on the harvester's ch

THE 1993 BUSINESS WEEK FUTURE OF WORLD COMMUNICATIONS SYMPOSIUM

NEW ALLIANCES FOR THE NEW AGE OF GLOBAL MARKETS



rmation infrastructure" is one of
nore high-tech mantras rising
e the chanting din in
hington since the Clinton
inistration's arrival. The
nistration has outlined a $2 bil-
plan to construct a nationwide
rmation superhighway" linking
nced supercomputers. The
rhighway will move massive
ints of information instantly
a high-speed fiber optic net-
to universities, libraries, labora-
, hospitals, and homes — trans-
ng the way the nation lives,
s, learns, and plays.
intriguing are the prospects of
uperhighway that rival long-dis-
telephone carriers called a
and made a rare display of
by jointly urging President
on to let private companies
and manage the national net-
. Cooperation in constructing
uperhighway underscores a
r development in telecommuni-
ns. **Pekka Tarjanne,** secre-
general of the International
communication Union, explains, "The old alliances and rivalries between governments and carriers that have shaped national telecommunications systems are obsolete. New and creative relationships must emerge for the information society of the 21st century."

At **The 1993 Business Week Future of World Communications Symposium**, Tarjanne addressed more than 200 representatives of some of the largest corporate users of telecommunications services, as well as a number of the top "Telcos"— leading telephone companies — from around the world. They convened under the aegis of *Business Week* to discuss the mushrooming demand for instant communication on a global basis, and how corporations and alliances of telephone companies are working together to make the miracle of the telephone still more useful.

YOU SAY YOU WANT A REVOLUTION?

Until now, communicating around the world has been riddled with obstacles, hampered by bottlenecks and borders. Telecommunications was mired in the trenches of government ownership or unyielding government-granted monopoly.

The revolution breaking on the horizon of the information age is a product of historic coincidence: Rapid technological innovation is rushing in to fill a free-market vacuum left by communism's demise.

From this coupling of technology and tumult, opportunity springs. The future of world telecommunications is tethered to the global trend toward liberal democracy and free market economics. Already a $900 billion market— more than the GNP of the entire United Kingdom — the telecommunications industry will grow by a third, to $1.2 trillion by 1995.

Telecommunications is inseparable from the growth, globalization, and liberalization of economic activity. **James Ross**, chief executive of Cable and Wireless Plc. observes, "Telecoms is one of the key drivers of economic develop-

ment. Telephone penetration and GDP growth go hand in hand. Potentially, everybody is a customer." Ross cites Cable and Wireless Communications' success in the U.S. as an example of the opportunities available to international carriers in a regulatory-friendly market. "We have been able to achieve our strong position in the market because of the relative openness of the regulatory regime here." But he cautioned, "There remains considerable uncertainty over the application of the FCC's recent ruling on dominant status, and the restriction on foreign ownership of radio spectrum remains a major obstacle."

The Customer Is Always Right

The world's 500 largest multinational corporations form the major catalyst for change in telecommunications services. Customer voices are loud and they are getting louder. Who are they, and what are they looking for?

According to **Mark Winther**, vice-president for Electronic Communications Services at LINK Resources, the customer driving the industry is multinational, spends an average of $70 million per year on telecommunications, and expects carriers to deliver top-notch service worldwide. "Users expect to get internationally what they get domestically," Winther says.

Meeting customer needs requires a lot of research, and the bridging of many gaps in telecommunications infrastructure from region to region. According to Winther, "The fact is that there are a lot of regional diff·rences and regional influenc·s around the world. These have :mmense implications for the size and character of customer demand, which in turn greatly influence the shape of the global communications network.

"In Personal Computer (PC) and Local Area Networks (LAN) penetration, for example, in the U.S. there are only about two employees per PC; in Europe there are six; and in Asia, seven. LANs are even more revealing. "There is a very different infrastructure look to companies around the world. Even though we call them multinational, where they come from has a lot to do with what they set as their telecommunications requirements, capabilities, expectations—and spending."

James Ross
Chief Executive
Cable and Wireless plc

"Telecoms is one of the key drivers of economic development. Telephone penetration and GDP growth go hand in hand. Potentially, everybody is a customer."

European companies tend to spend about 50¢ of each dollar of the telecoms budget outside their headquarters country. In the U.S., only 30¢ per dollar is spent outside the country. This suggests that European companies may be multinational in a much more integrated sense than American firms.

Hands Across the Water

As the nervous system of business, telecommunications gathers and distributes the information that forms the lifeblood of international commerce. As business interests reach out to every point on the globe, telecommunications carriers adapt.

"The central forces driving change," says **Marie-Moniq Steckel**, president of France Telecom North America, "ar increased competition throu the business world, and incr cooperation among carriers way of dealing with that co tive environment."

British Telecommunicati North America President a CEO **Jerry Thames** agree "Customers today are lookin strategic vendors to support entire network, which they define as desktop to deskto continent to continent. This means BT will enter more alliances with companies tha extend our capabilities."

Marie-Monique Steckel
President
France Telecom, NA

"The co driving increase tion thro the busi and incr cooperat among a way of with tha tive envi

"It's in our own collectiv interest as an industry to ma our networks work together Cable & Wireless's Ross insis we can accomplish that, we remain masters of our own d tiny. If not, we are doomed become prisoners of our pas

Would You Be Mine

Today's global networks are gams of mobile satellite syste strategic communication alliances, and one-stop com cations providers — each in ceivable without an innovati

t of cooperation among communications carriers ldwide.

ne spectrum of telecommuni-ons alliances is broad. ngements between carriers e from firms contracting with other to provide factors of luction, to financially integrat-oint ventures. **Gabriel Sidhom**, ce Telecoms' vice-president Product Development, points "Alliances are motivated by nomic factors that include not profit seeking but also risk ing, rent-seeking, and free-rid-considerations."

"Customers today are looking for strategic vendors to support their entire network, which they often define as desktop to desktop, continent to continent."

D THAMES
DENT & CEO
RITISH
MUNICATIONS

illiam F. Wallace, senior -president of Gemini sulting notes the business cli-e has never been more suit-for making telecommunica-s alliances. "Today, with the vergence of communications, puters, consumer electronics, content, we see a driving d for new, more complex nces. It is simply too difficult costs too much for one com-y to manage all these different ponents," Wallace says.

BT's Thames says that forging nces has become a corner-e in the carrier's global strate-"BT's vision is to become the ld's most successful telecom-munications company. We're going to do it by becoming a global player focused on meeting the communications requirements of multinational companies and their extended enterprises." But the information technology world today turns on a dime, so BT concluded, "We can't always do all that by ourselves; alliances are in order and necessary."

MARRIAGES MADE IN H...?

Despite the numerous reasons for the ongoing proliferation of telecommunications alliances, alliance is not always the best

"Many alliance partners don't go in with a learning mindset, and that is probably the major reason alliances fail."

WILLIAM F. WALLACE
SENIOR VP
GEMINI
CONSULTING

business decision. "We've seen too many marriages made in hell," testifies **Joseph Ambrozy**, vice-president for Strategic Planning at Bell Atlantic. "They were the result of differences among the partners in terms of vision, culture, time expectations, and propensity to take on risk."

Since alliance growth increased forty-fold in the 1980s, the vulnerable nature of alliances has become more and more evident. "An alliance is like submarine duty," Ambrozy says, "temporary, but close and intimate nonetheless. If you're thinking about entering into an alliance take a good look at yourselves and at the other people getting into that cramped little submarine."

Taking a good look at yourself before entering into an alliance can mean the difference between success and failure. According to Gemini's Wallace, there are two essential variables to plot when considering entry into an alliance — level of commitment required and level of organizational learning required. "Many alliance partners don't go in with a learning mindset, and that is probably the major reason alliances fail."

Others, according to Wallace, fail by choosing the wrong type of alliance management. "The options range from outsourcing and licensing, to the Japanese-style *keiretsu*, or the short-term "virtual corporation" where companies come together momentarily to tap into a market opportunity and immediately disband after the opportunity has been achieved. The right alliance management depends on the circumstances, the customer need you are trying to meet, as well as an understanding of your own core competencies."

NIRVANA

There have been marriages made in heaven. Reading market signs correctly, thoroughly examining each partner's goals and capabilities, and luck have allowed some of the world's largest telecommunications carriers — often rivals — to find the perfect partner.

France Telecom North America President Marie-Monique Steckel describes her carrier's most important alliance: "EUNETCOM, which we formed in 1992 with Deutsche Telekom, is a bilateral alliance we designed to provide end-to-end communications solutions to large multinational companies. The alliance works at the commercial

and marketing level to combine each carrier's resources and provide customers a more complete offering of services. The key to this alliance is having the flexibility to design install, operate, and manage customized outsourcing solutions for multinational clients. EUNETCOM permits us to respond to our customers' needs in a more dynamic and capable way than if either of us were to attempt to address our customers' needs on our own."

BT North America & Syncordia President and CEO Jerry Thames is also a model alliance-maker. "Our customers are looking for strategic vendors to support their entire network, which includes physical and applications domains, so BT will also enter alliances with companies that have core capabilities in the non-telecom segments to ensure we cover the IT spectrum to our customers' satisfaction." Thames indicated that Syncordia is working with two leading systems integrators to meet the global IT requirements of British Petroleum. "It's a sign of things to come," he said.

The Future Unfolding

The companies that find nirvana in alliances that bridge gaps in global telecommunications service and make innovations in the services they offer, are winning in the race toward true global communications. The ones that don't will likely fail. Wallace sees this as an essential paradigm shift in the industry. "I think it's important to note that it's not the resource starting position, but more the creativity and inventiveness companies use in establishing an intent and arraying alliance resources to achieve that intent. These are the factors that are going to determine success or failure in the future. This is the future of the corporation." ■

When the Walls Come Tumbling Down

The Honorable Robert J. L. Hawke, Prime Minister of Australia, 1983-91.
"Governments in the Asia Pacific-region are acutely aware of the extent to which sophisticated, reliable, and cost-effective telecommunications can be a key tool in building a stronger and more integrated economy. They are aware that this not only helps a nation to enhance its economic growth and internationalize its economy; it also helps to promote social coherence and development as it allows the population to communicate and work together, and share information, skills, and knowledge. The level of funds available to boost necessary telecommunications development differs dramatically from country to country and is leading to the creation of unique and innovative alliances and partnerships between telecommunications carriers from around the world and among the governments in the region. Many of the region's countries have ambitious development programs of which a key part is investment in telecommunications infrastructure. To make sure these programs are met, the region's countries will have to form alliances with the world's telecommunications carriers to bring in the necessary foreign investment, capability, and expertise."

Jean-Charles Rouher, Secretary General, International Chamber of Commerce
"Events are moving more quickly than law and regulation. Many countries have already reached an advanced stage in the development of their telecoms regulation. For them, the likely scenario for telecoms in the year 2000 will be full competition in all telecommunications services and regulations, limited only to fair competition. Still, many countries have a long way to go. Before they can enjoy the benefits of a more efficient more competitive telecoms environment, they find themselves confronting the question of how to shed their telecoms regulation to maximize the benefits now being enjoyed by advanced countries."

Yves Doz, John H. Loudon Profess of International Management and Associate Dean for Research and Development, INSEAD
"Deregulated services are providing entry for new competitors. In the nex few years, we can expect the end of national voice network monopolies. I think the argument for market growth and the opportunity for market growth provided by deregulation has gained c dence in Europe and has prompted a shift in national regulatory policies in most countries. This has resulted in a industry shift from local-to-local natio alistic orientation to a much more ope globally competitive set of companies and opportunities."

Richard J. Barber, Executive Directo Pacific Telecommunications Counc
"Concern for doing business in China h centered on the lack of fully developed and stable regulations. With as many a 31 different government operators repo ing to the Ministry of Posts and Telecom munications in the middle of an estima 13% per annum growth, the prospects well-defined rules of the game seem remote. Meanwhile, Taiwan is edging toward privatization. For the longer-term future, the telecommunications opportunities presented by the prospe of a unified China, including the parti pation of the Chinese diaspora, create very powerful image."

Tedson J. Meyers, Esq., Reid & Pri
"Telecommunications privatization and liberalization are taking place worldwide In Latin America, it began with the privat zation of the *Compania de Telefonos de Chile* in 1988. The sell-off of controllin interest in TELMEX has been the most recent notable example of successful act ities. However, the situation in Colombia and Brazil, where the plans to privatize national carriers have run into union an political difficulties, points out the need f foreign investors to proceed with caution and to take into consideration the unique social and political circumstances in eac country. In our experience, similar guid lines apply in creating virtually all private international telecoms ventures."

TERS

ACKARD BELL DISCOVERS BON AMI

PC maker gets a needed cash infusion from Groupe Bull

What do a lumbering French mainframe computer maker and an upstart U. S. seller of computers have in common? They vant to increase their presence in oming personal-computer market. the rationale behind the ane ement June 22 that France's e Bull, with $6 billion in annual ues, will take a 19.9% stake in rd Bell Electronics Inc., with about illion.

o? Packard Bell, a ny lots of people they might have of. It was spun the breakup of one system, they , or maybe it has hing to do with ett Packard Co. even recall—cor— a TV maker by ame in the 1950s. lly, though, Pack- ell is the biggest of personal com- in mass-merchan- stores such as Roebuck, Circuit and Wal-Mart. y buying into it, vernight gains ac- o 7,000 retailers struggling Zenith Systems Corp. liary, an Illinois- PC maker it paid nillion for in 1989. gains the help of a company with utation for designing inexpensive p machines. "I see a lot of syner- etween our companies," says Ze- Data CEO Jacques Noels. "I'm look- rward to a winning alliance."

DSEND. Under the arrangement, will supply its notebook comput- r sale under the Packard Bell label, he two firms will jointly develop uild new desktop PCs starting this The deal, which Bull would not put e tag on, is a godsend for Zenith, some analysts estimate has lost y for the last three years. Bull not want to give up its only access to the PC market or a chunk of the U. S. market. But its willingness to fund Zenith Data's research and development has worn thin as its own mainframe losses have climbed. The $5.7 billion government-owned computer maker has lost $2.7 billion since 1990. Plus, the French government has called for a turnaround plan that prepares Bull for privatization—and that means more spending cuts.

The clearer winner is Packard Bell. The Chatsworth (Calif.) company desperately needed some financial resources to help it fend off the growing competition in the mass-market channels it pioneered. Seven-year-old Packard Bell has been wildly successful in selling where America shops. Walk into almost any department or discount store, electronics retailer, or warehouse club, and Packard Bell occupies prime real estate in the computer section.

Still, Packard Bell's title as king of the retailers is getting a lot harder to hang on to. For the five years ended in 1991, it had a net loss of $10 million, which threatened to stall future growth. And with IBM, Compaq Computer, and other giants jumping into the chain stores, "they're much more vulnerable than they've been in the past," says Richard Zwetchkenbaum, an analyst with International Data Corp. Where Packard Bell once fought for shelf space against obscure brands such as Laser, Magnavox, Positive, and Leading Technology, now it is competing against the companies with deep pockets.

PAMPERED RETAILERS. The Bull deal should change all that. "Our competitors have had no advantage over us except for their lower cost of capital," says Beny Alagem, Packard Bell's chairman and CEO. "This will help put our cost of money on a par with other computer manufacturers." By cleaning up the company's highly leveraged balance sheet, the deal will enable it to negotiate far more favorable terms from lenders. Over

WHERE PACKARD BELL FITS IN

GROUPE BULL A $6 billion mainframe computer and electronics conglomerate, majority owned by the French government.

ZENITH DATA SYSTEMS The personal computer arm of TV maker Zenith Electronics Corp. until acquired by Groupe Bull in 1989. Has about 2% share of the U.S. PC market.

PACKARD BELL In need of cash, the privately held, $975 million PC maker is selling a 20% stake to Groupe Bull and forming a technology and manufacturing alliance with Zenith Data Systems.

DATA: BUSINESS WEEK

PHOTOGRAPH BY DAVID SPECK (CHICAGO)

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the past six years, interest alone has cost it more than $60 million, leading to losses in 1990 and 1991, according to Securities & Exchange Commission filings. The privately held company will now say only that its operations are profitable.

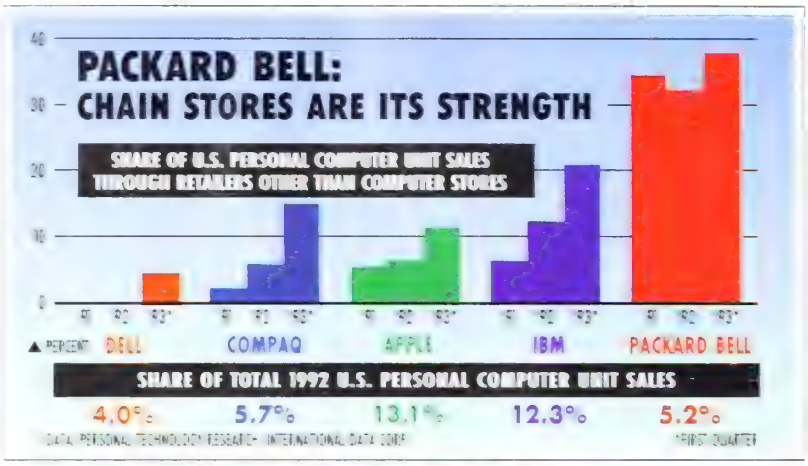
HEADACHE. Despite its financial problems Packard Bell's low manufacturing costs—and its pampering of its retailers—has allowed it to hold its own and even thrive against substantial new competition. Packard Bell's sales spurted 37%, to $925 million, last year, and it expects revenues to pass $1.2 billion this year. That kind of selling pace allowed Packard Bell to increase its leading share of the retail market from 32% in 1992 to 37.7% in this year's first quarter (chart).

It has also led to a huge headache—a high rate of returns. The cost of those returns even cost it an initial public offering planned and then withdrawn last year. According to its IPO filing with the SEC, more than $140 million worth of shipments in 1991—about 17%—were returned to the factory. Of that, $40 million was unsold inventory, which Packard Bell was able to update and reship. In the past less than 2% were defective; everything else was returned because buyers were confused, disappointed, or determined to have something else—a projection TV, for example.

While returns are common among [illegible] retailers, running 10% to 15% of everything sold, a ye[illegible] Packard Bell set up a formal prog[illegible] minimize them. Some of the c[illegible] are simple, such as including a w[illegible] on the backup MS-DOS diskettes [illegible] customers that the program was [illegible] installed in the c[illegible] er. Other change[illegible] more substantial[illegible] ard Bell spent [illegible] writing a pr[illegible] called Navigator, [illegible] text mode user[illegible] the ambiguities [illegible] Corp.'s W[illegible] operating system[illegible]

Now Packard [illegible] jumping on the [illegible] train. It has [illegible] that PCs based o[illegible] Corp.'s next-gen[illegible] Pentium chip, w[illegible] be on the marke[illegible] it has been earl[illegible] multimedia computers. This year [illegible] media-equipped PCs will account [illegible] much as 30% of its sales. Not [illegible] that company with the vaguely [illegible] name.

By Larry Armstrong in Chic[illegible] Calif.



CAN ZENITH DATA CLIMB BACK FROM THE DEPTHS?

It's always tough for pioneers when the crowd starts closing in. And onetime laptop whiz Zenith Data Systems Corp. has been feeling the squeeze. Four years ago, it was the profitable portion of a company whose TV business had fallen on hard times. Today, under the ownership of France's Groupe Bull, its share of the booming laptop market has sunk to 9% from 23%. Losses over the past three years have totaled an estimated $200 million, according to analyst Bruce Stephens of International Data Corp. No wonder Zenith execs are eager for help from Packard Bell Electronics Inc.

Hooking up with the master of the superstores lets Zenith crank up unused capacity to make laptops that Packard Bell could sell under its name in discount outlets. That might allow Zenith bigger manufacturing runs to bring down costs per laptop, more money for product development, and a chance to recapture lost market share. "Zenith Data needed some volume to pump through their factory in order to keep alive," says Bill Ablondi, an industry analyst, with researcher BIS Strategic Decisions. "My feeling is it had more capacity than customers."

Zenith's desktop PC business has been even more hostile than laptops because of price wars and Zenith's tiny presence in the market. For Zenith, the $2 million or so cost of designing a new machine and starting production has become unrealistic at present sales levels. Dataquest Inc. estimates that Zenith's U.S. desktop sales fell last year to 58,000, from [illegible] in 19[illegible]

JUICY BUSINESS. Yet Zenith, headquartered in Buffalo Grove, Ill., needs to remain in desktop computers to hang on to its lucrative government business. Earlier this year, the U.S. Air Force named the company one of two suppliers for a PC contract of up to $724 million. Zenith Data CEO Jacques Noels says that with Packard Bell sharing desktop design costs, Zenith can remain in desktops while allocating a greater share of its R&D budget to portables. Before linking up with Packard Bell, Zenith Data had approached several PC makers, including Japan's NEC Corp., with joint design and manufacturing proposals.

> Hooking up with Packard Bell will let it crank up unused capacity

Melding Zenith's notebook [illegible] with Packard Bell's price-conscio[illegible] ers may not make for the easies[illegible] Zenith has already been disapp[illegible] by a January, 1992, agreement to [illegible] ThinkPad 300 notebook compute[illegible] IBM. Zenith's high costs, industry [illegible] lysts say, didn't leave IBM suff[illegible] room to price the ma[illegible] competitively.

Come September, [illegible] Data will find out wh[illegible] it has any better luck [illegible] Packard Bell. That is [illegible] the two companies e[illegible] the first Zenith-buil[illegible] chines to land in the [illegible] American electronics [illegible] that now carry Pa[illegible] Bell personal comp[illegible] Noels has already s[illegible] employment to reduc[illegible] costs. Since January, he has lopp[illegible] some 400 employees—or 17% o[illegible] work force. So what Groupe Bul[illegible] for its latest investment, on top [illegible] $511 million it originally spent f[illegible] nith, is a chance to keep Zenith [illegible] feet for one more round in the b[illegible] business.

By Gary McWilliams in [illegible]

IN A GLARING FAUX-PAS, THE WHITE HOUSE NEGLECTS TO INCLUDE *YOU* IN A SIT-DOWN ON HEALTH CARE. WHAT NOW?

With an award-winning Washington bureau and a penetrating presence on Capitol Hill, Business Week provides its audience with near-proprietary access to the world of health care. Not to mention hundreds of other worlds of critical importance to the world's most discerning business readers. We call this kind of reporting, this kind of access, *intelligence*. Which is also what we call contacting us.

BusinessWeek

Beyond news. Intelligence.

EDITED BY AMY DUNKIN

Insurance

POLICE YOUR POLICY—NOW

Wayne Bohrer, a 55-year-old federal employee, bought a $50,000 whole-life insurance policy eight years ago, thinking it would be paid up by this year, when he qualified for retirement. But last September, Bohrer's annual premium notice called for a ninth payment of $1,218. When he requested more information, he got a shock: His policy had not been accumulating value at nearly the rate he expected, and it would take at least five more years of $1,218 payments—or 60% more cash than he planned on spending—to keep the policy in force. Bohrer is canceling his policy instead.

Bohrer is one of thousands of the 120 million cash-value life insurance policyholders who discovered just how wrong estimates for a policy's future value could be. Thousands more who haven't checked their policies are in for the same sad surprise.

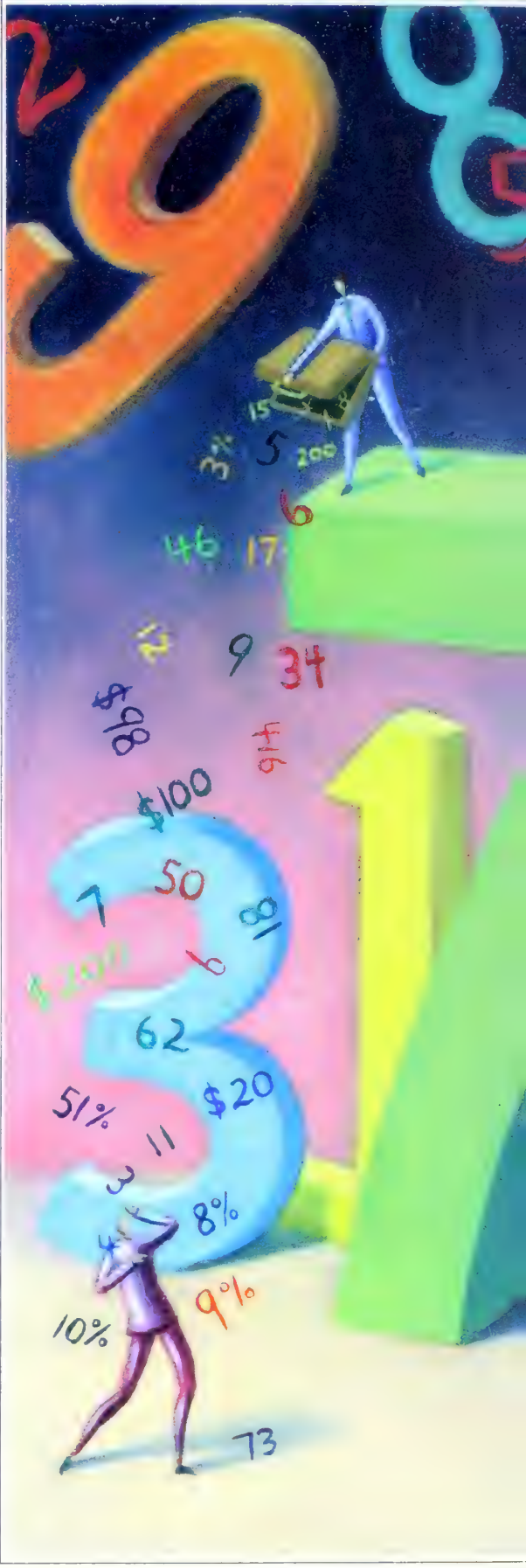
LITTLE ACTION. The shortfall is the result of the downward spiral in interest rates over the past seven years. Lower rates undermined insurance-company estimates for how long it would take premiums to vanish—in other words, for a policy's cash value to become large enough for dividends and interest to cover the payments. Not only are premiums on many policies issued in the 1980s still unexpectedly due but some policies are so severely underfunded that they are about to lapse.

The insurance industry and regulators have been scrambling to improve disclosure since the crisis surfaced last year. Their focus has been to change the way pricing information is provided to customers at the point of sale. So far, there has been much study but little action.

When life-insurance agents make a pitch, they usually generate a sales "illustration" on their computers. These documents, which run several pages in length, include several columns of numbers listing the customer's age, the annual premium, the projected cash value, the guaranteed policy value, and the death benefit for every year the policy is held up to about age 95.

EDUCATED GUESS? But illustrations are fraught with problems. Columns of numbers are boring and confusing, so people don't read the material carefully and miss important disclaimers. Insurance agents are free to manipulate the numbers via computer programs, making illustrations easy to abuse. Information on the strength and size of the company, cancellation charges, and the agent's commission structure is left out.

But the biggest problem is that the insurer is only guessing. Illustrations are always based on the dividend scale companies are currently paying to policyholders. They demonstrate the increase in value of a policy over time if all the conditions that go into determining the scale—including mortality rates, return on investments, lapse rates, and expenses—remain the same over the next 30 or 40 years. Fat chance. "There are far too many people who think that because an illustration is generated by a computer and has a lot of numbers, the price has got to be guaranteed," notes Burke Christensen, general counsel to the American Society of Certified Life Underwriters & Char-



Financial Consultants. orically, insurance com- have made money , passing the profits off cyholders at a greater an the illustrations had ed. No one complained premiums were paid up sh value was accumu- more quickly than had nticipated. "We all got d by this," says Fred a Chicago insurance and chairman of an an Society task force g the illustration issue. ll of a sudden, interest started coming down. of us had ever dealt at."

decline in interest ffected the companies' on investments, forc- em to lower the divi- cale paid to policyhold- ost drastically since igns are that insurers educe nonguaranteed gain this year.

E STATEMENT." Any pol- t has a provision for d premium payments is ble to becoming under- . Although a good vill send customers cur- lustrations every few they are not required clients up-to-date.

illustrations must in- he caveat that the val- presented are not guar- . Bohrer remembers this disclaimer—"the lity exists that cash m payments may be ed for more or fewer than the period illus- —on his Prudential il- on. "I was left with the at eight years should are of it," he says. "I t that could be off by a of years in either direc- Not five years more." ing before a Senate mittee at a May 25 on life-insurance dis- , he told Senator How- etzenbaum (D-Ohio): "I believe such a vague ent is enough to warn their retirement is at

zenbaum is expected to ce legislation to create ral insurance commis- at would set guidelines strations. A similar bill never made it out of committee last year.

Industry groups are also trying to improve disclosure without limiting their ability to sell. The American Society has created an "IQ," or illustration questionnaire, for agents to garner enough information from the insurance company to inform policyholders if the illustrations are based on reasonable assumptions. Various industry groups suggest the use of signed disclosure statements and more description of the vanishing premium concept.

Insurance companies are also trying to improve illustrations. Companies are tightening disclosure language, showing cash accumulation under scenarios other than just current dividend rates. Some companies are also considering rounding off numbers so that premium payments and nonguaranteed values would not be shown to the exact dollar.

But consumers must be vigilant. The commission structure for agents does little to encourage ongoing monitoring of an account. Most agents get the bulk of their commission the first year—typically, more than half the initial premium—and small residuals each year the policy is in force. It's a good practice to review any policies you own, especially if purchased in the early to mid 1980s, when interest rates were higher. Request an "in-force" illustration every few years and compare the difference in cash value with the original illustration. Contact the policyholder-services department or your agent with any questions you might have.

If possible, try to make sure the assumptions used in the illustration are reasonable before you buy. Unrealistic illustrations, of course, make policies seem cheaper than they are and allow for easier sales. For example, agents will usually show the lowest premiums for "preferred" policyholders in excellent health. But some companies give very few of its healthy customers this rating. Also, some insurers will assume mortality rates will continue to improve in the future as a way to increase their projected dividends.

REPLACEMENT RUSE. Your agent should be able to answer questions about the assumptions used in illustrations, but if not, you can get help for a fee. Beacon Co. in West Bloomfield, Mich. (800 824-1274), will evaluate an illustration for $108, and actuary James Hunt can tell you the true rate of return on a policy for $35. For Hunt's service, send your illustration and a self-addressed stamped envelope to the National Insurance Consumer Organization, 121 N. Payne St., Alexandria, Va., 22314.

Illustrations seem to provide a great way to compare policies but are actually based on such different assumptions that fair comparisons are impossible. Unscrupulous agents may try to generate new sales off existing customers using illustrations that look more favorable than the one for an old policy. Replacing a policy generates big commissions for the agent but rarely benefits the consumer.

If illustrations are so problematic, why doesn't the industry stop using them? The truth is, they are excellent tools for agents to demonstrate how complicated life-insurance policies work. Also, says Beacon President Peter Katt, if insurers could not utilize "current assumption pricing," they would be more conservative and premiums might be higher. Policyholders must find an insurance agent they can trust in addition to doing their homework. "This isn't something you buy and then throw in a safe-deposit box and forget about," says Judy Faucett, an actuary at Coopers & Lybrand. If you do, you could be in for a big shock just when you think your insurance policy is finally paid off. *Amey Stone*

QUESTIONS FOR YOUR LIFE-INSURANCE AGENT

- Is the insurance company in sound financial health, and how large is it?
- How highly is it rated?
- Are individual-life policies part of its core business?
- What rates does the policy guarantee?
- Are there cancellation charges, and what are they?
- How difficult is it to qualify for the 'preferred' underwriting class, meaning you would be entitled to the cheapest rates?
- What kind of assumptions does the company use to predict future premium payments?
- Has the agent received the company's response to the 'IQ,' an industry questionnaire about how investment returns, mortality charges, and expenses were predicted?
- Can you see premium payments required for several scenarios that would produce different rates of return?
- Can the agent run the numbers every year or two to make sure your policy is up-to-date?

DATA: BUSINESS WEEK

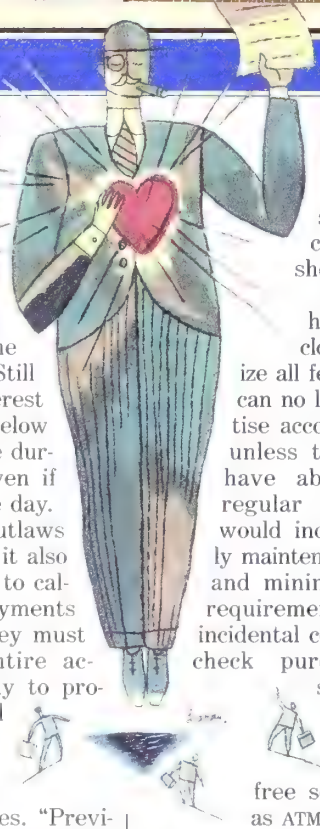
CHECK THE CASH VALUE ON YOUR POLICY TO MAKE SURE YOU DON'T COME UP SHORT

Banking

FINALLY, IT'S TRUTH IN SAVINGS TIME

It's depressing enough to put money in a bank at today's piddling interest rates. But it's worse when you get interest on only a portion of your balance. Until now, some banks were able to whittle away at your interest payments. But as of June 21, the deadline for compliance with the Truth in Savings Act (TISA), banks can no longer get away with that. And they have to make it easier for you to understand how both your interest and your fees are calculated.

Some banks have been taking advantage of deregulation by paying interest on only 88% to 90% of account balances. Their justification: Since they had to set aside 10% to 12% of their funds in reserve, they couldn't invest that part of your savings and make money on it. Other banks based interest for the entire period on the lowest, rather than the average, balance. Still others paid no interest if an account fell below a minimum balance during the period—even if it was for only one day.



TISA not only outlaws such practices but it also requires all banks to calculate interest payments the same way. They must compound the entire account balance daily to produce an annual percentage yield. The APY will make it easier to compare bank rates. "Previously, there was a lot of confusion in the way interest was calculated from bank to bank," says Chris Lewis, director of banking and housing policy at Consumer Federation of America. "That prohibited consumers from comparison shopping."

Banks also have to disclose and itemize all fees, and they can no longer advertise accounts as free unless the accounts have absolutely no regular fees. That would include monthly maintenance charges and minimum-balance requirements, but not incidental costs, such as check purchases and stop-payment charges. Banks can advertise free services such as ATM use and can label accounts free even if limits apply—say, if only nine checks a month are free. But limitations must be clearly stated. Banks also must warn depositors 30 days before they plan to lower rat otherwise act to the ment of your savings. gives you time to shop alternative.

SHOP AROUND. Many ba are unhappy about the rules. "We think it is expensive and cumbers says Philip Corwin, a tor of the American Ba Assn. Consumer gr which pushed for the say the banks are wh "Our analysis of their studies shows that their are going down while fe going up three to six the rate of inflation," say mund Mierzwinski, direc the U. S. Public Interes search Group.

If you want to take a tage of the new regs, for a bank by comp APYs. Go for the highes only after you are sure the fee structure is at equal between banks wi ferent yields. The Tru Savings Act may not ge laughing all the way t bank, but you're more to be smiling. *Pam*

Smart Money

TO MOVE OR NOT TO MOVE YOUR MUNI MONEY

July 1 has always been a red-letter day for municipal bond owners. That and New Year's Day are when semiannual coupons get paid, bonds mature, and bonds are called. This July 1 will be especially eventful. With municipalities scrambling to refinance debt at today's low rates, a record $10 billion in bonds will be called. Add the proceeds to another $10 billion in coupon payments and maturing bonds, and you'll see why muni investors will be sitting on a huge hoard of cash.

If you're one of them, you may be tempted to shovel your distributions back into similar securities. That's an option—but these days, it shouldn't be an automatic response. "People need to be careful about reinvesting in munis, especially now that they're being hyped as the latest and greatest investment," says Richard Wagner, president of Sharkey, Howes, Wagner & Javer, a Denver financial planner. "Their tax-free status alone isn't enough to make them a great investment."

The risk of buying now is that you'll lose money if rates go up and bond values fall. Wagner advises anyone getting a lump-sum payment from a callable bond to consider other investments, including stocks.

Not everyone shares that caution. A prevalent view on Wall Street is if you're already in munis, stay in them. After all, President Clinton is trying to raise tax rates, which makes tax-exempts more attractive. "Investors who are in munis because they wanted a high aftertax return and relatively low market volatility compared with equities should stay in munis," says George Friedlander, fixed-income strategist at Smith Barney, Harris Up

There is no way to re the muni yields of the 1 except perhaps by buyin rated bonds, which is no visable due to the risk o fault. Bonds rated A or offer yields only frac higher than AAA iss When shopping, ask if a is callable, and if it is, out the yield to the call Also stick with insure prerefunded bonds, whic guaranteed to be paid.

It is possible to own m and still hedge your be you decide to reinvest, do so defensively, says I lyn Cohen, who manage dividual bond portfolio L&S Advisors in Los Ang She suggests assembli collection of short- to i mediate-term bonds tha come due every year or in staggered maturiti strategy called ladde That way, you'll always money to reinvest in interest rates start mo up. *Leah*

IF YOUR MUNI IS CALLED...

Issuer/AAA bond	Matures	Coupon
NYS DORM. AUTH./ COLUMBIA UNIV.	2013	10.125
MASS. HEALTH & EDUC. FACIL. AUTH./MASS. GEN. HOSP. SERIES C	2003	9.625

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It's all about working together. Teleglobe sets itself apart by working with leading manufacturers of bridges and routers to ensure flawless compatibility. And their reputation for reliability and outstanding support make them a leader in their own right.

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If there's one thing we know about computer networks, it's that we don't know everything. No one does. That's why we've created Interprise and partnered with other leaders in the communication industry. But above all else we believe the most important partnership we can make is with you. We can make it work.

It's about speed, and then some. Over the past thirty years, Motorola Codex has pioneered every analog transmission speed breakthrough in the industry, as well as setting the standard for the new Frame Relay protocol. But more than that, they have the ability to translate multiple protocols over a single network. They'll make it work. Quickly. Because you just don't have time to waste.

When you think of an intelligent wiring hub system, there's really one word that should come to mind: SynOptics. Not only are they the leader in market share, but their product development is unsurpassed, laying the groundwork not just for easy migration of applications today but to accomodate growth and future data strategies.

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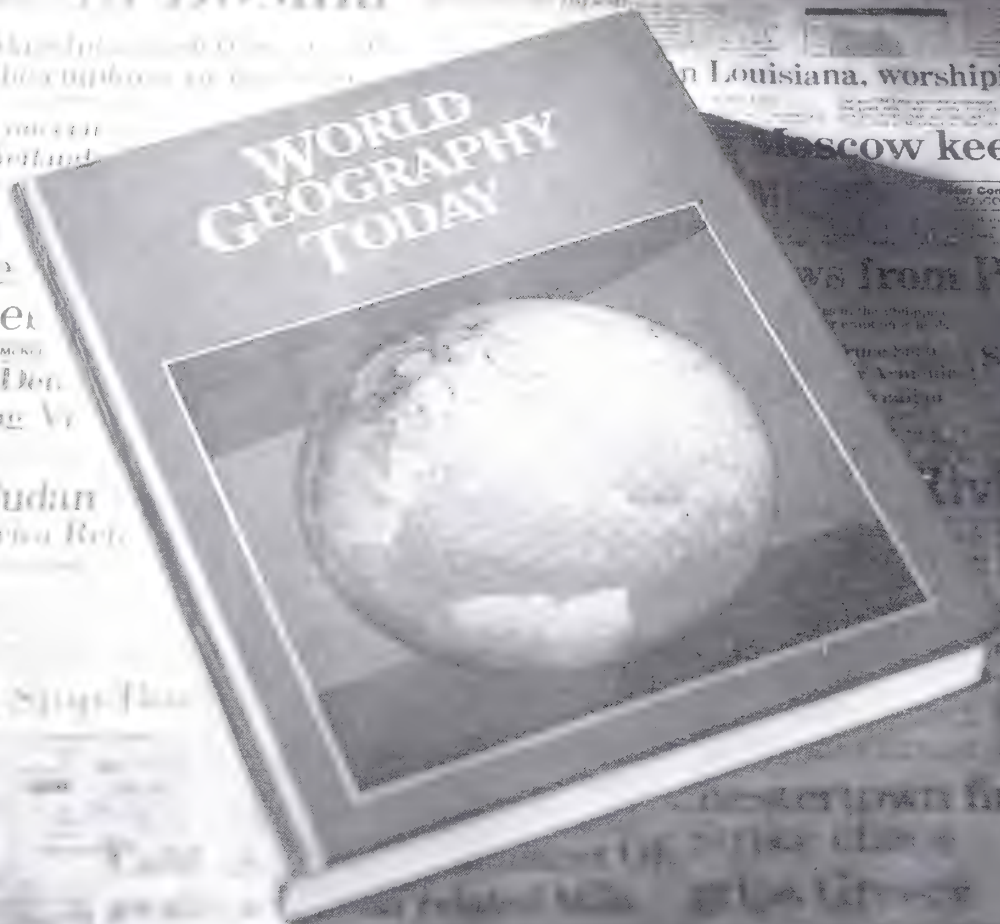

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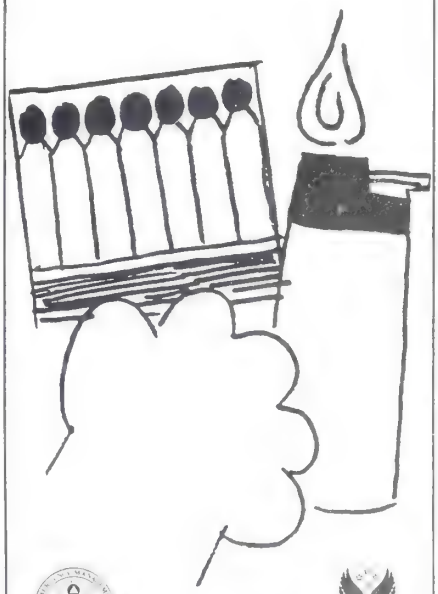
CURIOUS KIDS SET FIRES

When a kid strikes a match, fire strikes back! Children don't realize that a simple flame can blaze out of control in mere minutes. That may be why nearly twenty-five percent of the fires that kill young children are started by children themselves playing with fire.

Don't let fire strike your family. Always keep matches and lighters far out of the reach of children.



A message from your local fire department, this publication, and the U.S. Fire Administration.

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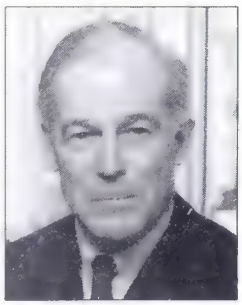

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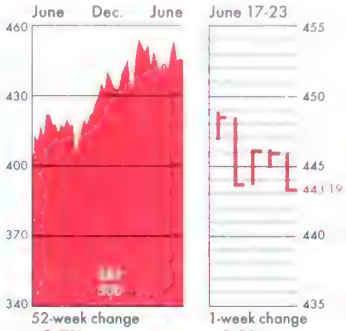
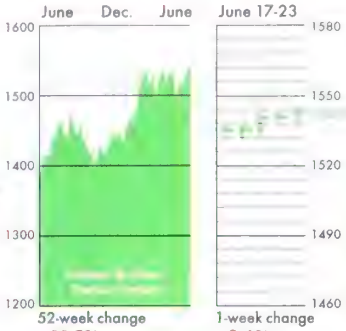
STOCKS



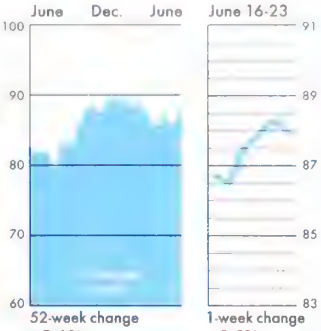
52-week change +9.7%
1-week change −0.9%

BONDS



52-week change +11.5%
1-week change +0.6%

THE DOLLAR



52-week change +5.6%
1-week change +1.4%

KET ANALYSIS

CKS	Latest	% change Week	% change 52-week
ES INDUSTRIALS	3466.8	−1.3	5.4
OMPANIES (S&P MidCap Index)	163.5	−0.6	19.8
MPANIES (Russell 2000)	227.7	−1.0	22.2
ANIES (Russell 3000)	254.0	−0.8	12.1

I STOCKS	Latest	% change (local currency) Week	% change (local currency) 52-week
FINANCIAL TIMES 100)	2900.7	0.6	14.5
KKEI INDEX)	19,492.5	−2.1	23.0
(TSE COMPOSITE)	3951.6	1.5	18.3

FUNDAMENTALS	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.19%	3.11%	3.72%
30-YEAR TREASURY BOND YIELD	6.76%	6.81%	7.82%
S&P 500 DIVIDEND YIELD	2.80%	2.80%	3.05%
S&P 500 PRICE/EARNINGS RATIO	22.3	22.6	24.7

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 26-week moving average	443.6	443.4	Negative
Stocks above 26-week moving average	52.2%	53.2%	Negative
Speculative sentiment: Put/call ratio	0.50	0.47	Positive
Insider sentiment: Vickers sell/buy ratio	2.18	2.28	Neutral

STRY GROUPS

BRIDGE INFORMATION SYSTEMS INC

EK LEADERS	% change 4-week	% change 52-week	Strongest stock in group	% change 4-week	% change 52-week	Price
AL MANAGEMENT	21.4	2.6	GALEN HEALTH CARE	38.0	55.2	18 5/8
UILDING	9.2	55.7	CENTEX	11.3	65.1	33 1/8
ERING AND CONSTRUCTION	7.9	9.8	FOSTER WHEELER	11.5	16.5	29 1/8
E	6.1	42.5	MBNA	20.0	57.2	28 1/2
RAGE FIRMS	6.0	47.4	MORGAN STANLEY GROUP	9.5	36.1	66 1/2

EK LAGGARDS	% change 4-week	% change 52-week	Weakest stock in group	% change 4-week	% change 52-week	Price
	−20.9	5.5	GENESCO	−30.1	34.9	7 1/4
ES	−18.6	−4.7	USAIR GROUP	−30.9	34.4	15 5/8
LTY APPAREL RETAILERS	−12.3	3.0	CHARMING SHOPPES	−23.2	−10.2	13 1/4
AL MERCHANDISE CHAINS	−9.7	−0.6	DAYTON HUDSON	−15.7	−6.8	63 1/4
ACTURED HOUSING	−9.2	29.8	FLEETWOOD ENTERPRISES	−10.0	35.2	18

UAL FUNDS

MORNINGSTAR INC.

S total return	%
STRATEGIES	12.5
NZIE CANADA	7.2
ER LATIN AMERICA	6.6

otal return	%
E-STATE STREET GLOBAL ENERGY	68.1
GROWTH	66.6
HANCOCK SPECIAL EQUITIES A	55.1

LAGGARDS Four-week total return	%
SHERMAN DEAN	−12.0
MONITREND GOLD	−10.7
FIDELITY SELECT AIR TRANSPORTATION	−7.9

52-week total return	%
PROGRESSIVE AGGRESSIVE GROWTH	−19.8
FINANCIAL STRATEGIC ENVIRONMENTAL	−16.6
DFA CONTINENTAL SMALL COMPANY	−12.1

TIVE PORTFOLIOS

DATA RESOURCES INC.

mounts
t the present
$10,000
one year ago
portfolio

ges indicate
total returns

Foreign stocks	Treasury bonds	U.S. stocks	Gold	Money market fund
$12,327	$12,210	$11,359	$10,708	$10,238
−4.63%	+0.60%	−0.08%	+0.94%	+0.05%

this page are as of market close Wednesday, June 23, 1993, unless otherwise indicated. June 22. Mutual fund returns are as of June 18. Relative portfolios are valued as of June 22. A more
oups include S&P 500 companies only; performance and share prices are as of market close detailed explanation of this page is available on request.

JAPAN: HOW MUCH WILL IT REALLY CHANGE?

Japanese society distinguishes between *tatemae*, which is diplomatic truth or polite fiction, and *honne*, the inner truth, the kind disclosed late at night among close colleagues, after many drinks. With President Clinton traveling to Tokyo for a Group of 7 economic summit in July and Administration officials preparing a new Japanese trade strategy, the U. S. should keep that distinction in mind.

The *tatemae* coming out of Tokyo is that Japan is undergoing a major political upheaval, with fractures in the corrupt Liberal Democratic Party preparing the way for a reformed, consumer-minded coalition government that will deregulate the economy and open it up to imports.

The *honne* may be a bit different. For decades, factions have formed around powerful personalities within the LDP. What is new this time is that two small factions are calling themselves parties. The parties say they want to end the money-politics corrupting the Japanese system. The only trouble is that the men leading the rebellion are among the most notorious money-politicians in the country. Ichiro Ozawa is the protegé of disgraced political boss Shin Kanemaru, about to stand trial for having $40 million in cash and gold bars in his home and office, allegedly from political payoffs. Ozawa, with his own reputation for being a money-politician, is hardly the reformer he presents himself to be.

Ozawa's political ally Tsutomu Hata is a former agricultural minister who fought long and hard against imports of U. S. farm products. He is best remembered for saying in 1986 that Japanese intestines are too short to digest American beef. Hata, who could be the next Prime Minister, is not a likely pro-consumer, open-market advocate.

If there is less than meets the eye on the political front in Tokyo, there may be more going on economically than is publicly acknowledged. Japan in the 1990s is quite different from the Japan of the 1980s. While big business and government bureaucracies still dominate, the image of an economic juggernaut conquering global markets no longer holds.

The bursting of the "bubble economy" and a 50% d in the stock market have finished Japan's zero-cost fo ital. Japanese companies, like their rivals in the U. S Europe, now must operate to make profits, not simply crease world market share. Gone is the open-wallet sp on research and development. Today, R&D spending is selective, with a focus on the bottom line. That's par reaction to the fact that billions spent on high-definitio vision and fifth-generation computers turned out to b bets on the wrong technologies. Additional billions have wasted on foreign real estate and attempts to penetra eign banking markets.

Looking at the global economy, it is the U. S. that is ing on strong, dominating multimedia, biotechnology, tainment, and the nascent market in mobile persona municators. American companies, once again producing goods at cheaper prices, are regaining lost market sh autos, computers, printers, chips, steel, and constr equipment. If the '80s were a decade dominated by hard which is still Japan's main strength, in the '90s value ing to be added by software, which is clearly dominat U. S. companies.

Negotiating with Tokyo on the assumption of impe radical political and economic change would be premat best. A pro-consumer, open-market government and s may make their appearance in Japan sometime in the f But for now, U. S. negotiators will likely face the same nosed bureaucrats, backed by the same tough busines fighting for the same pro-Japan agenda as before.

Hata, Ozawa, and the younger generation of new po leaders who are now rebelling against the LDP may h desire for reform, but they also share a growing willin to say "no" to U. S. requests to reduce the trade d Which makes it all the more important for Washington its homework on the "new" Japan—before trade negoti actually begin.

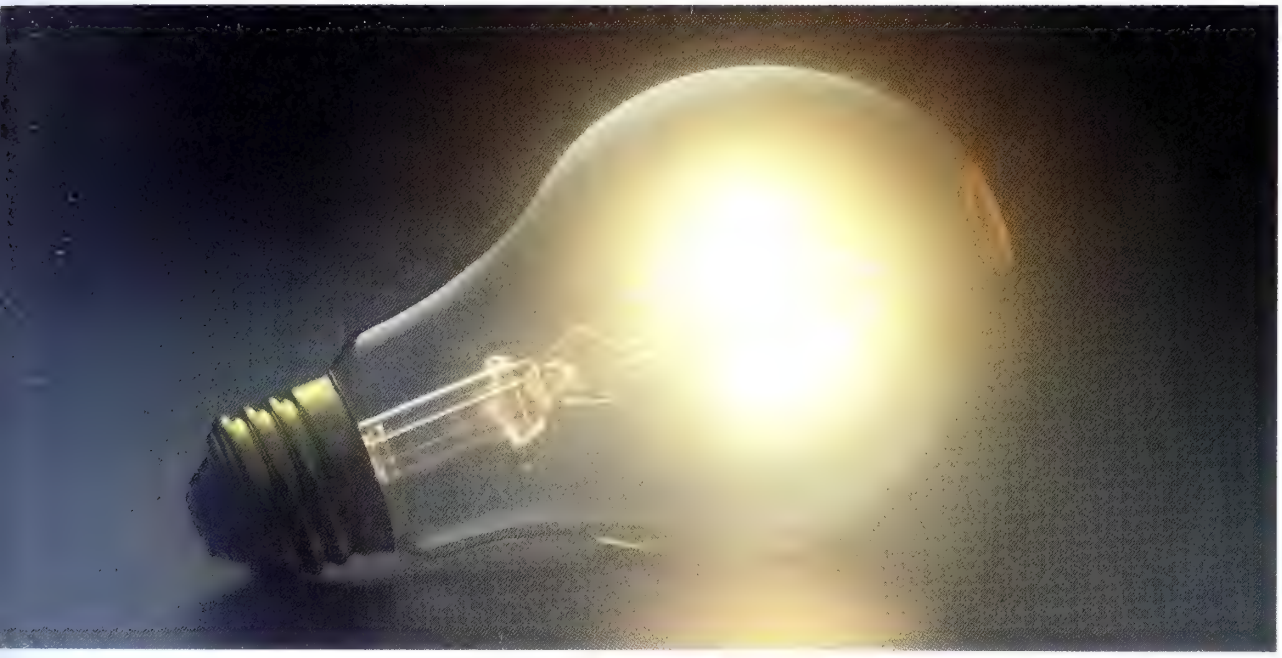
TO REINVENT GOVERNMENT, MAKE IT FLEXIBLE

Most Americans think the service they receive from government stinks and feel that their taxes are not well spent. It is this sentiment, not merely the weight of the overall tax burden, that is at the heart of the popular distrust of Washington. So we applaud Vice-President Al Gore's current efforts to "reinvent" government and make it more efficient. Gore appears ready to recommend ending centralized procurement policies and empowering employees to make decisions on their own. Simply bringing the government office up to par with the corporate workplace by replacing typewriters and paper with computers and E-mail will boost productivity, assuming that managers and secretaries who are no longer needed are let go.

But the big challenges—and big savings—are going to come from the kind of tough political decisions that the C Administration has, so far, avoided. The civil service the equivalent of union work rules, must be rewritten t vide the kind of flexibility that companies are now e encing in the private sector. Government unions, afrai loss in jobs, are probably going to fight against this ch

Dumping outmoded agencies and programs, many of antiques left over from the Depression Era, will also b ficult. Do we still need a Rural Electrification Admin tion as we approach the year 2000? Do we want a s Farmers Home Administration providing low-interest for elderly farmers? Of course not. If Vice-President has the courage to tackle this government incrustation on, taxpayers across the land will bless him.

A KEY SANWA BANKING TEAM)OESN'T MAKE LOANS; IT MAKES IDEAS.



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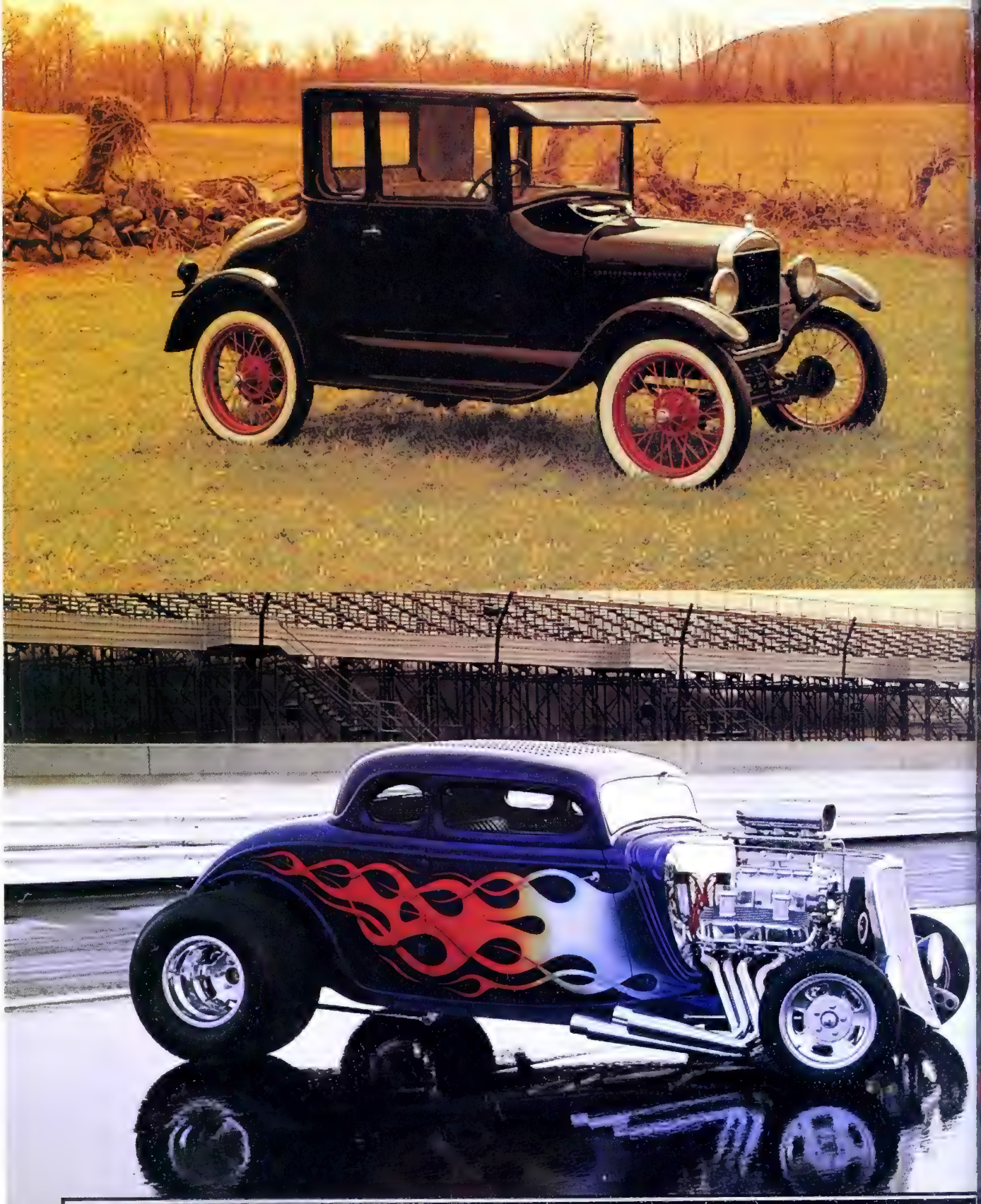

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will win.

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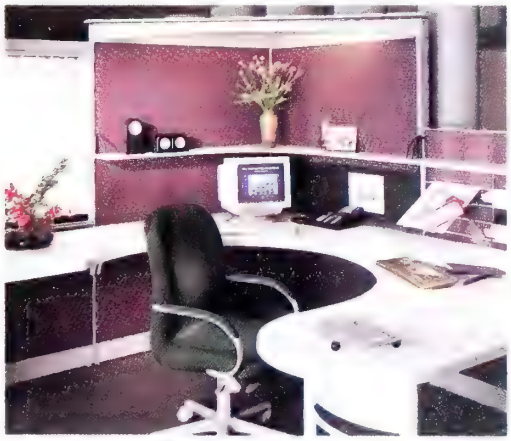

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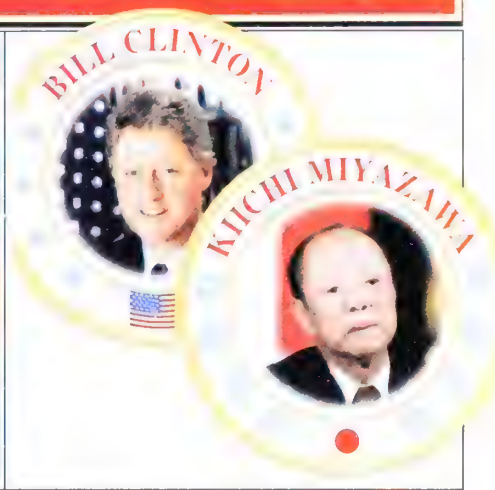

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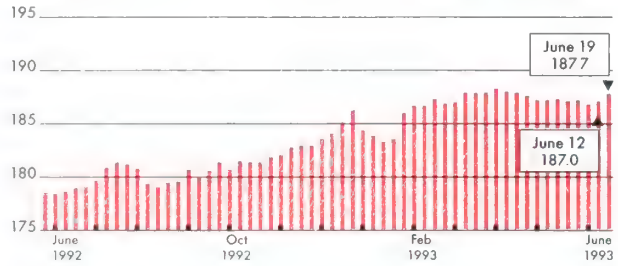
s Week (ISSN 0007 7135) published weekly, except for one issue in January, by McGraw-Hill Inc. U. S. subscriber rate $44.95 per year. In Canada, one year: CDN $66. Single copies, $2.75; back issues, $5. ve, Editorial, Circulation, and Advertising Offices: 1221 Avenue of the Americas, New York, N. Y. 10020. Second-class postage paid at New York, N. Y., and at additional mailing offices. Postage paid at al, P. Q. Registration Number 9010. Title Reg. in U. S. Patent Office. **Postmaster:** Send address changes to BUSINESS WEEK. P. O. Box 430, Hightstown, N. J. 08520

BusinessWeek Index

PRODUCTION

Change from last week: 0.3%
Change from last year: 4.9%

1967=100 (four-week moving average)

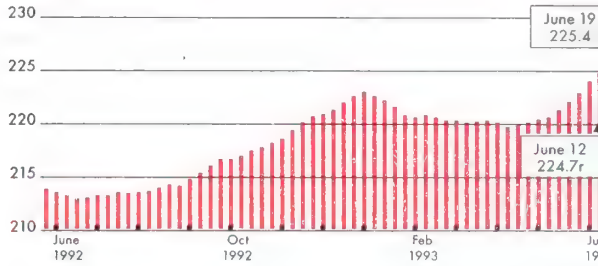


The production index edged up higher during the week ended June 19, but the index basically has moved little since April. On a seasonally adjusted basis, output of steel, autos, trucks, coal, and rail-freight traffic increased, while electric power and paperboard production declined. Output levels of crude-oil refining, paper, and lumber were unchanged from the previous week. Before calculation of the four-week moving average, the index rose to 188.7, from 188.

BW production index copyright 1993 by McGraw-Hill Inc

LEADING

Change from last week: 0.3%
Change from last year: 5.9%



The leading index continued to increase during the week ended June 19, the unadjusted index fell sharply, suggesting that the leading index will start decline in coming weeks. Deteriorating growth rates for materials prices, real est loans, and M2 offset lower bond yields and fewer business failures. Stock pri were virtually flat. Before calculation of the four-week moving average, the inc dropped to 225.5, from 227.3 in the previous week

Leading index copyright 1993 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (6/26) thous. of net tons	1,823	1,840#	1.2
AUTOS (6/26) units	134,818	134,337r#	9.2
TRUCKS (6/26) units	101,414	99,828r#	33.1
ELECTRIC POWER (6/26) millions of kilowatt-hours	63,643	62,580#	6.4
CRUDE-OIL REFINING (6/26) thous. of bbl./day	14,149	14,101#	−0.6
COAL (6/19) thous. of net tons	18,955#	18,304	−1.1
PAPERBOARD (6/19) thous. of tons	819.4#	827.4r	0.4
PAPER (6/19) thous. of tons	797.0#	790.0r	1.7
LUMBER (6/19) millions of ft.	458.4#	461.3	−2.2
RAIL FREIGHT (6/19) billions of ton-miles	21.5#	21.2	0.5

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA[1], SFPA[2], Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (6/30)	106	109	124
GERMAN MARK (6/30)	1.69	1.69	1.51
BRITISH POUND (6/30)	1.51	1.47	1.92
FRENCH FRANC (6/30)	5.70	5.69	5.09
CANADIAN DOLLAR (6/30)	1.28	1.28	1.20
SWISS FRANC (6/30)	1.50	1.50	1.35
MEXICAN PESO (6/30)[3]	3.116	3.116	3.095

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (6/30) $/troy oz.	378.450	367.100	10.2
STEEL SCRAP (6/29) #1 heavy, $/ton	111.50	111.50	23.9
FOODSTUFFS (6/29) index, 1967=100	202.3	204.5	−1.1
COPPER (6/26) ¢/lb.	89 0	88.6	−19.5
ALUMINUM (6/26) ¢/lb.	55.3	54.0	−3.8
WHEAT (6/26) #2 hard, $/bu.	3.16	3.31	−16.6
COTTON (6/26) strict low middling 1-1/16 in., ¢/lb	54.78	55.71	−8.3

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, *Metals Week*, Kansas City market, Memphis market

LEADING INDICATORS

	Latest week	Week ago	% Ch year
STOCK PRICES (6/25) S&P 500	445.91	446.73	
CORPORATE BOND YIELD, Aaa (6/25)	7.29%	7.32%	–
INDUSTRIAL MATERIALS PRICES (6/25)	95.8	95.4	
BUSINESS FAILURES (6/18)	361	369	
REAL ESTATE LOANS (6/16) billions	$397.9	$400.4r	
MONEY SUPPLY, M2 (6/14) billions	$3,482.5	$3,484.8r	
INITIAL CLAIMS, UNEMPLOYMENT (6/12) thous	345	344	–

Sources: Standard & Poor's, Moody's, *Journal of Commerce* (index: 1980=100), Dun & street (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally ad data on business failures and real estate loans

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Ch year
MANUFACTURERS' INVENTORIES (May) billions	$381.4	$380.3	
12 LEADING INDICATORS COMPOSITE (May) index	151.6	152.0	
NEW HOME SALES (May) annual rate. thous.	571	723	
PERSONAL INCOME (May) annual rate, billions	$5,296.6	$5,266.3r	

Sources: Commerce Dept.

MONETARY INDICATORS

	Latest week	Week ago	% Ch year
MONEY SUPPLY, M1 (6/14)	$1,070.6	$1,072.7r	
BANKS' BUSINESS LOANS (6/16)	276.2	274.8	
FREE RESERVES (6/23)	633	708r	–
NONFINANCIAL COMMERCIAL PAPER (6/16)	164.0	155.4	

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	
FEDERAL FUNDS (6/29)	3.00%	2.98%	3.
PRIME (6/30)	6.00	6.00	6
COMMERCIAL PAPER 3-MONTH (6/29)	3.26	3.24	3.
CERTIFICATES OF DEPOSIT 3-MONTH (6/30)	3.20	3.23	3.
EURODOLLAR 3-MONTH (6/25)	3.21	3.19	3

Sources: Federal Reserve Board, First Boston

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipt
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

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Readers Report

THE STUDENT-LOAN PLAN DESERVES BETTER MARKS

Gary S. Becker completely misrepresents the Clinton Administration's plan to reform student loans ("Clinton's student-loan plan deserves an 'F,'" Economic Viewpoint, June 14). The plan is designed to simplify the program, make loan repayment easier for students, and save taxpayers billions of dollars. President Clinton's direct-loan proposal would save tax dollars by virtually eliminating profits to banks and other middlemen and would make loans cheaper for borrowers.

Student loans are not analogous to car loans. By definition, student borrowers are a risk; they rarely have substantial collateral or a significant work history. However, as a matter of public consensus, we have agreed that it is in the national interest to assure access to higher education for those who are academically prepared—not just for the wealthy, as Becker seems to suggest.

Further, Becker is wrong in asserting that the proposal—which would allow but not require borrowers to repay based on a percentage of income—is designed to average out payments of high- and low-wage earners. The Clinton Administration's proposal does not include such cross-subsidization. When high-income borrowers fully repay their loans, they stop paying.

Finally, the National Service plan is hardly sending "a dubious message." The plan is quite clear: College graduates can benefit economically from higher education. It is also beneficial to give them the opportunity to serve communities.

Richard W. Riley
Secretary
U. S. Education Dept.
Washington

ONLY STRONG MANAGEMENT CAN PROTECT AFRICAN WILDLIFE

I was surprised and disappointed by your cursory review of Raymond Bonner's *At the Hand of Man* ("Endangering species," Books, June 21).

All responsible conservation organizations, including the African Wildlife Foundation, have for years known and acted on the belief that the future of Africa is in the hands of the local communities and individuals.

We also recognize there are instances where wildlife utilization or trade in animal parts (in this case, elephant ivory) can be an economic benefit to African nations.

Our concern, however, is that wildlife utilization occur only when there is a responsible management plan in place that can sustain the species. By the late 1980s, statistics showed that up to 100,000 elephants were being poached a year, leading some experts to predict virtual extinction within 6 to 10 years.

The 1989 worldwide ban on the commercial trade in elephant ivory, supported by most African nations, has been a conservation success story, with poaching coming to a halt almost overnight.

Paul T. Schindler
President
African Wildlife Foundation
Washington

ANOTHER BALLOT CAST FOR 'THE POLITICS OF MEANING'

Your article on Michael Lerner's "politics of meaning," while exciting for those of us who have followed the evolution of his ideas, was nonetheless superficial at best, a self-serving distortion at worst ("What does 'the politics of meaning' mean for America?," Top of the News, June 21).

Instead of focusing on the unique core of Lerner's theories that the desire for human community and connection played a large role in the election of the last four Presidents, you instead focus your criticism on Lerner's only recently offered suggestions for implementing his ideas.

Your article suggests that Lerner's ideas would and should be dismissed as "New Age babble and existentialist blather" if only for the fact that now-influential people, in this case Hillary Rodham Clinton, have shown interest. Such cynicism and infatuation with power and prestige only illustrate characteristics of the media that Lerner himself discusses extensively.

In the 1980s, the politics of unabashed

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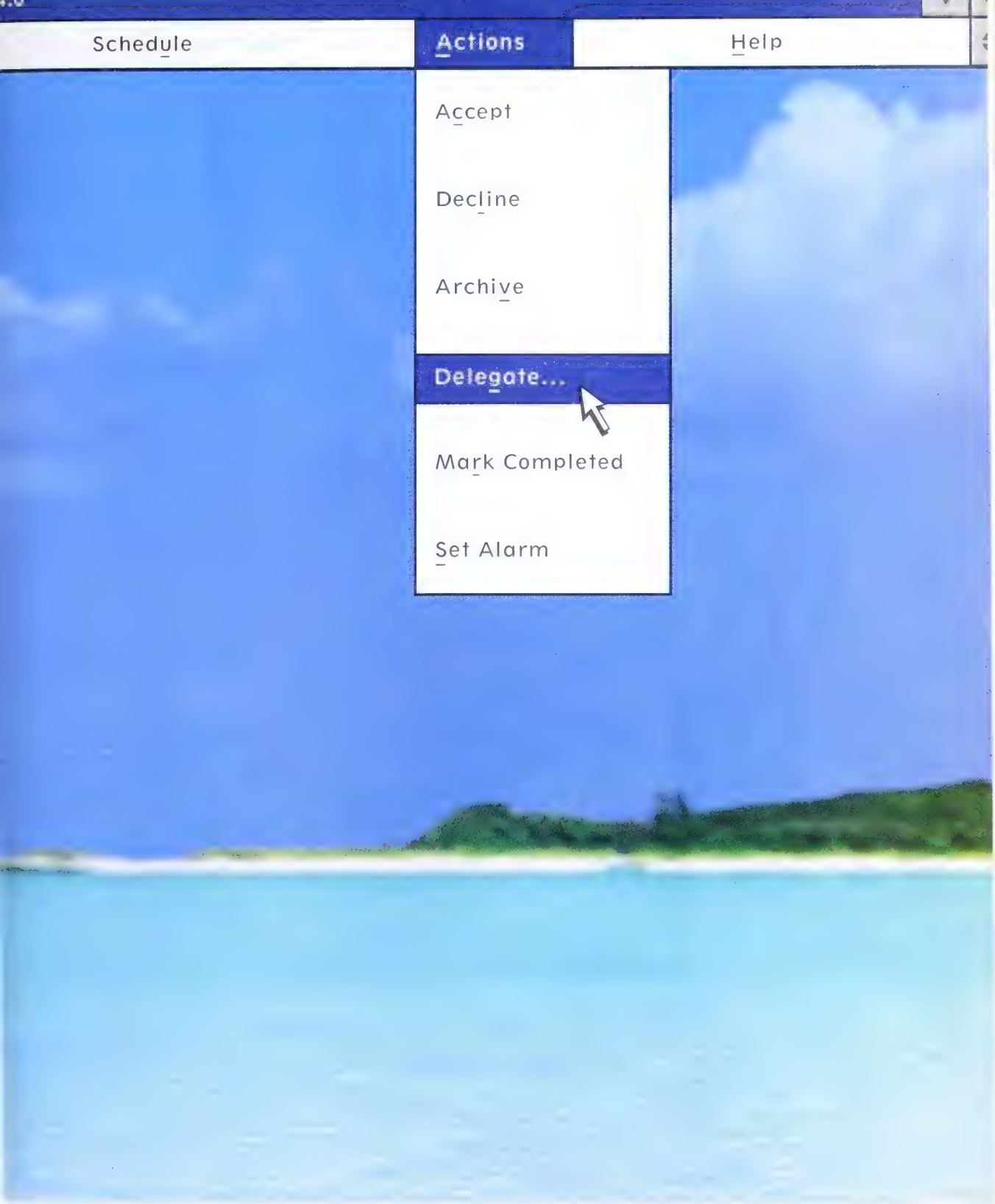

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Readers Repo

CORRECTIONS & CLARIFICATION

"Ivy and innovation: B-schools that harder" (Personal Business, Jun erroneously stated that a $20 mil gift to Michigan State University the largest gift to a public-univer B-school. The University of Michi has received $30 million to estab the William Davidson Institute.

The credit for the illustration acc panying "Summer books: Play catch-up on the beach" (Books, Jul was omitted. The illustrator was J Sanders.

and unfettered self-interest led tripling of the national debt under guise of tax relief and looting of th tional treasury by savings-and-loan artists.

Is this the result of getting dow "the hard work of running the gov ment," to which your article sugg Lerner's politics of meaning "will scant help?" If so, then I'll take Le every time.

Michael Joh
Oakland, (

MAKE A BETTER $1 COIN, AND PEOPLE WILL USE IT

Regarding your article "A $1 could save Uncle Sam $400 mill year" (Economic Trends, June 28), a tance of a $1 coin is not the prob The problem was a $1 coin that lo like a quarter, felt like a quarter, spent like a quarter because it was stantly mistaken for a quarter, u one was extremely careful.

Give Americans a coin that looks a dollar, feels like a dollar, and sp like a dollar, one whose value ca instantly determined by anyone. The will be accepted without hesitation

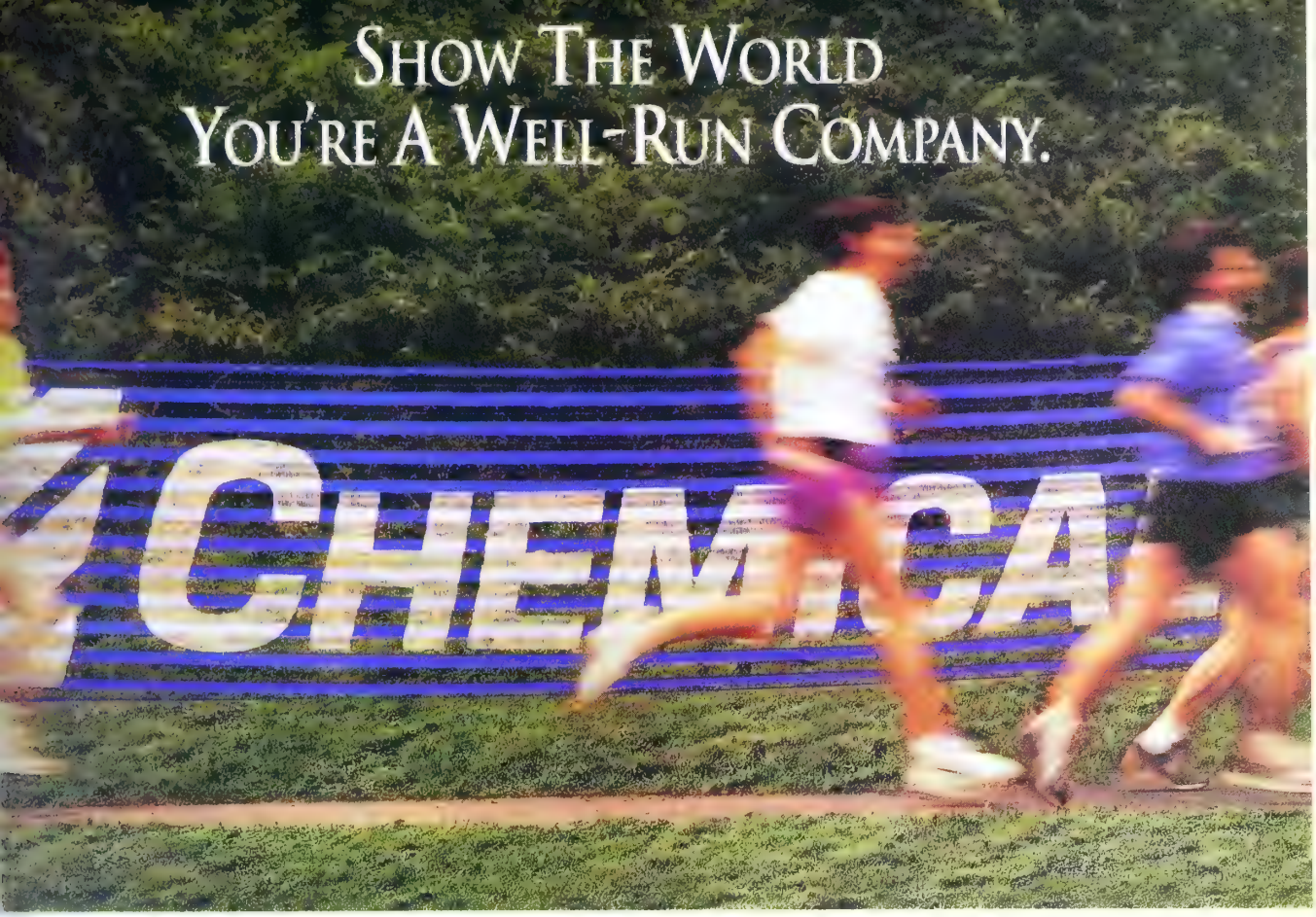
George A. W
Fillmore, (

My suggestion: Remove the co colored pennies. Introduce a t er, brass-colored $1 piece similar t Dutch five-guilder coin (which, by way, is worth about $2.70).

I hope Congress and the U. S. T ury get behind this idea quickly, so payers can start saving on the ord half a billion dollars or more per y

Ariela G.
The Hague, Nether

Letters to the Editor should be sent to Readers Business Week, 1221 Avenue of the Americas York, N. Y. 10020. Fax (212) 512-4721. All must include an address and daytime and eveni phone numbers. We reserve the right to edit let clarity and space.



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LENIN'S TOMB: THE LAST DAYS OF THE SOVIET EMPIRE
By David Remnick
Random House • 576pp • $25

UNVEILING THE EVIL EMPIRE'S UGLY SECRETS

If ever there were a topic ripe for definitive treatment in a book, it is the profound and swift collapse of Soviet communism in the late 1980s and early 1990s. Journalists in the Soviet Union at the time scored impressive scoops. But events have moved too fast for book authors, since publishers need nearly a year to get a work into print. Most books issued so far have been outdated long before release.

Until now. David Remnick's *Lenin's Tomb* is a brilliant effort—a delightful read, full of pathos and humor, woven of keen reporting and a deep understanding of Russian and Soviet culture. Remnick, a Moscow correspondent for *The Washington Post* from 1988 to 1991, sidesteps the problem of chronicling a country in constant flux by focusing instead on why the mighty Soviet monolith fluttered away like a stack of cards.

His answer: The empire could not survive once the evils of communist rule were known and absorbed. True, many brave Russian writers and activists, from Aleksandr Solzhenitsyn to Andrei Sakharov, had long struggled to expose the horrors of Stalinism and other atrocities. But not until a clever communist *apparatchik*, Mikhail Gorbachev, unleashed *glasnost* in 1987 could the full weight of that history be felt.

The result was hardly what Gorbachev intended. Once out of the bottle, the truth genie brought the demise not only of Gorbachev but also of the communist state he wanted to modernize. Remnick writes: "Whether he relished the task or not, Gorbachev was acting as the keeper of the secrets, the chief curator of the Party's criminal history."

Criminal indeed. Remnick, a sk
writer, uses chilling flourishes to
vey the horrors of Stalin's terror.
desolate primary school he visits,
example, he finds odd drains in the f
Their purpose: to wash away blood
nighttime executions of political pri
ers by secret police. This macabre t
elogue continues with a visit to K
ma, in the Russian Far East, wl
political prisoners arrived by ship
were marched barefoot across the
to labor camps where most died. A
other spot, the wall of an execu
chamber holds a tiny door. To pre
doomed prisoners from becoming
terical, the door was used to shoot t
from behind, during what seemed
tine interrogations, Remnick explai

The point is not just the horror
its sheer scale. As Remnick relates,
if not scores, of millions have died s
the Bolshevik Revolution. Think of
gulags: From 1935, when Joseph Sta
great purges began, to January,
just before Stalin's death, nearly 20
lion people were arrested, and at lea
million were killed in prison. Ad
that several million who perished ea
during forced farm collectivization
intentional starvation, and the 22

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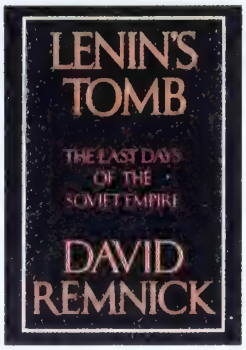
Just

n soldiers and civilians o died in World War These numbers are not ws, but Remnick's erviews with historians d survivors give them aning. Public response such monumental evil, mnick asserts, fueled country's breakup en more than the fail- economy.

A fascinating aspect of book is its exploration he conservatives' back- n against the trashing he country and ideolo- they believe in. Rem- k scorns right-wing uvinists, including anationalist racists and the boozy, in- leaders of the abortive 1991 coup. his credit, though, he doesn't exagger- the threat from the far right. And s evenhanded in his treatment of such servatives as Nina Andreyeva, the ndmotherly Leningrad chemistry cher who in 1988 wrote a notorious ense of Stalinism. In a memorable ne, Andreyeva, in her cozy apartment, unchly defends her views while slav- over lunch for Remnick. Right-wing- he writes, tend to be excellent cooks.

The author concludes that once the scale of the Party's atrocities became known, its demise was inevitable



Remnick's heroes are people, famous or obscure, who forced Russia to face its past. Chief among them are Aleksandr Yakovlev and Eduard Shervardnadze, top Gorbachev deputies who fearlessly pushed honest assessments of communism. Russian President Boris Yeltsin is also presented favorably by Remnick, who forgives his boorish shortcomings and praises his valor during the coup.

The biggest hero, though, is the late Andrei Sakharov, the H-bomb scientist turned human-rights activist who epitomized the Russian people's spirituality and bravery. After Gorbachev freed him from internal exile in 1986 as a political tactic, much of the population seized upon Sakharov as its guiding light.

In fact, the book's high point is the acrid interplay between the two at a Soviet Parliament session, when they clashed over limiting the Communist Party's power. The last Soviet leader, for all his glory, is shown up as a petty careerist unwilling to face the inevitable, while Sakharov, unyielding, "represented the hard and inescapable truth."

Remnick's excellent work might have given more weight to the declining economy as a factor in the Soviet collapse. But in the end, his analysis hits a bull's eye: The Russian people's respect for truth toppled what was arguably the bloodiest political regime of this century.

BY PETER GALUSZKA

Galuszka, BUSINESS WEEK's Moscow bureau chief from 1986-1989, is returning to the post this month.

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HOW TO SECURE SOCIAL SECURITY'S FUTURE

BY GARY S. BECKER

A privately managed system based on total contributions, retirement age, and marital status of family members would be largely insulated from low birth rates, funding crises, and politics

GARY S. BECKER, THE 1992 NOBEL LAUREATE, TEACHES AT THE UNIVERSITY OF CHICAGO AND IS A FELLOW OF THE HOOVER INSTITUTION

Social security systems in the U. S., Germany, and most other rich countries are in deep financial trouble—not necessarily this year or the next, but surely by early in the next century. One problem is a sharp decline in the number of workers, whose taxes support a growing number of retired persons. Another is politicians who have saddled these systems with expensive benefits unrelated to the accumulated compulsory savings of the recipients.

Both problems can be solved by returning to the original goal of social security: to provide retirees with benefits that depend on their contributions to a fund while they worked. This revolutionary idea, which first surfaced in Germany at the end of the 19th century, mandated savings by working people so that they would not become dependent on public support as a result of failing to save enough out of their earnings. If today's plans were based on actuarial principles, retirement income and social security taxes wouldn't be determined politically. They would be based on the total contributions, retirement age, and marital status of family members.

For example, a person who earned a 3% real rate of return on the savings of 10% of earnings over 40 years and who then retired at age 67 for 15 years would receive a pension equal to almost two-thirds of earnings. So a family that saved $3,000 a year from annual earnings of $30,000 for 40 years would get almost $20,000 a year in retirement income. With any children grown, they may be able to live as well or better than before retirement.

SMALL GAP. Still, even with mandatory contributions, some retired workers would not have a decent standard of living because they earned too little when they were younger, perhaps because of long stretches of unemployment or ill health. To bring them up to an agreed minimum standard, the state would have to supplement benefits out of its general tax revenues. But with an adequate level of required contributions, such supplementation would be necessary for only one in five U. S. families.

Since all developed countries rely on pay-as-you-go social security systems—where contributions from current workers support the retired—there is considerable concern about low birth rates. That means fewer workers will be available in the future to pay benefits to growing numbers of retirees. But there is a system where birth rates matter much less. In this approach, known as the actuarial system, each family funds its own retirement benefits from accumulated savings out of its own earnings.

Although this approach greatly helps in insulating a social security system from tics, it is possible to go further in this dire by allowing private companies to compet the privilege of managing individual soci curity accounts. There are precedents in countries where private companies con to manage company pension funds. I the Vanguard Group over alternatives to age my university retirement fund beca offers a rich menu of good investment op and provides monthly information on performance.

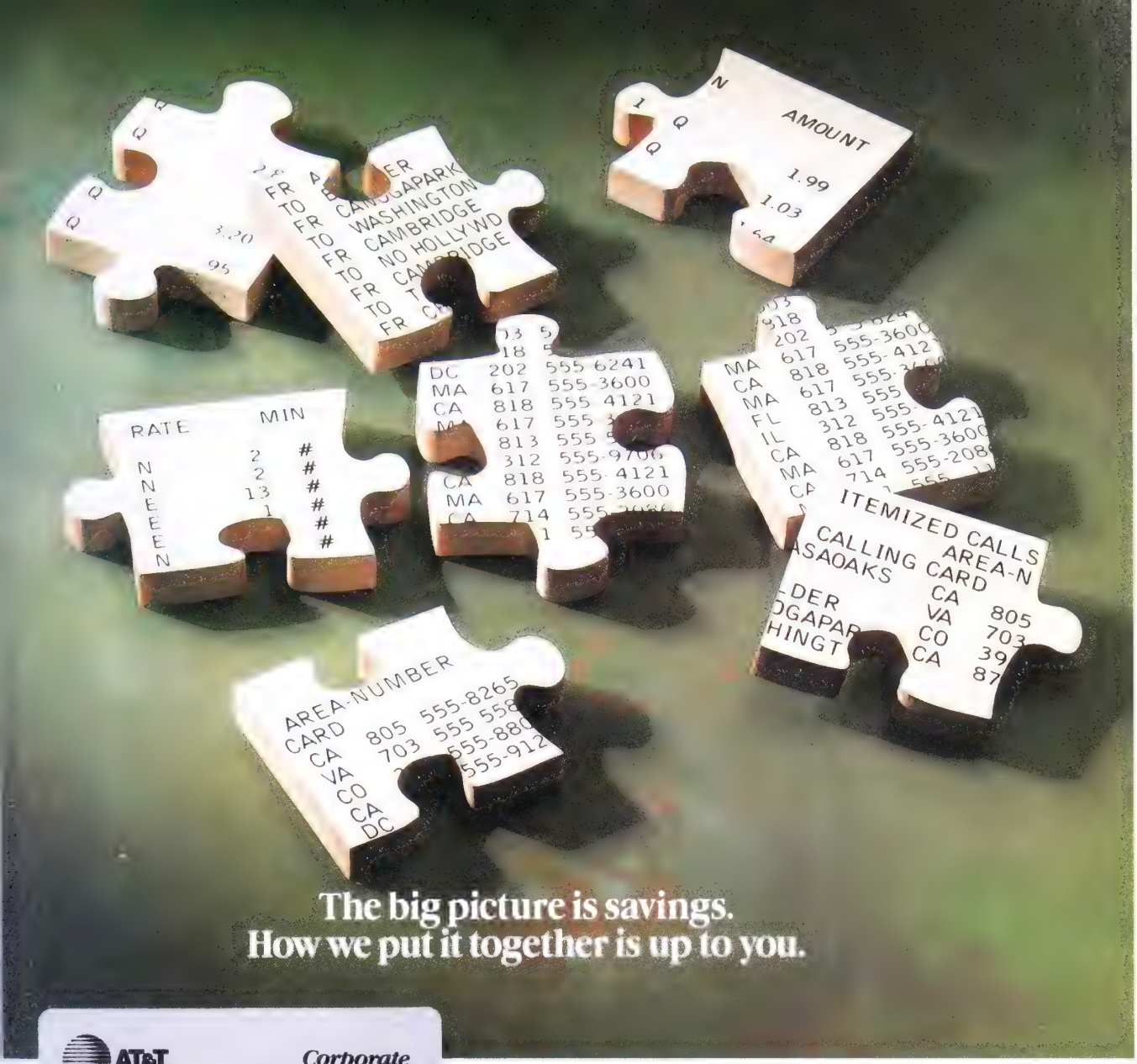
SAFETY FIRST. The worldwide movemen ward privatizing many diverse govern activities makes it unnecessary to dwe the advantages of introducing the compe efficiency of private companies into the security system. Retirees can be prot from excessive risk on their investmen requiring private management funds to sufficient capitalizations and limiting in ments to particular categories of securit

A privately managed, actuarially base age system may seem wholly impractica out of touch with political reality. But t precisely what Chile introduced 15 year after people there became fed up wit state social security system. Argentina the brink of following Chile's example.

Many private funds actively compe Chile for the right to manage the savings workers are required to put aside for the age. These funds have earned rather rates of return on investment, and con sions have steadily declined over time fraction of contributions. During a recen it to Chile, I didn't meet anyone who wa to return to the old system, which taxed 25% of earnings yet provided insufficien somewhat arbitrary retirement incomes.

Of course, older workers who have contributing for many years to the tradit system would have to be integrated int alternative I propose. Chile offered its wo the option of either remaining in a go ment system or transferring to the compe one along with a government bond that valued in proportion to their accumulated tributions. Chile's transition went smoo and practically all older workers opted o the traditional system—voting with their against state management.

The original aim of social security—to pel families to save out of earnings to vide for their old age—should be comb with the modern movement toward priva tion of state activities. This combination provide an effective retirement system would be insulated in large part from tics, low birth rates, and funding crises.



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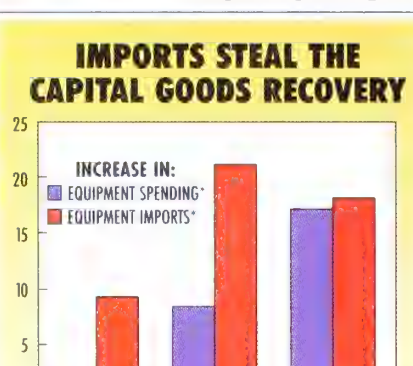
BY GENE KORETZ

THE CAPITAL SPENDING SPREE HASN'T SPURRED THE ECONOMY—YET

By any measure, the U.S. is enjoying a healthy capital-spending recovery. While investment outlays plummeted in recession-racked Europe and Japan last year, American businesses boosted equipment spending by 7.5% in real terms. And this year, according to the Commerce Dept.'s latest survey, total real capital investment is slated to rise by an even greater 9.1%.

Such spending is critically important to the nation's economic future. Equipment investment is the *sine qua non* of the productivity gains required to bolster the nation's competitiveness and restore sustained growth in living standards. Moreover, capital spending has been one of the few bright spots in the sluggish expansion, with 1992's rise in real equipment outlays equivalent to nearly a quarter of the economy's growth during the year.

IMPORTS STEAL THE CAPITAL GOODS RECOVERY



▲ PERCENT CHANGE IN REAL TERMS *EXCLUDES AUTOMOTIVE OUTLAYS
DATA: COMMERCE DEPT., DRI/McGRAW-HILL PROJECTIONS

Unfortunately, however, there's a less positive side to the developing capital-spending saga—the rapid gains being chalked up by capital-equipment imports. These inroads have been so great, reports economist Roger E. Brinner of DRI/McGraw-Hill, that such investment contributed virtually nothing to the economy's growth in recent years. "All of Corporate America's increased demand for capital goods was satisfied by foreign manufacturers," he says.

In 1991, for example, when the economy emerged from recession, business spending on new equipment actually declined. Yet imports of capital goods in real terms rose by $10.5 billion in 1987 dollars. And last year, as real nonautomotive-equipment outlays climbed by $25.8 billion, the increase was completely offset by surging equipment imports.

While foreign investment in the U.S. has helped foster this trend, economist H. Erich Heinemann of Ladenburg, Thalmann & Co. thinks a big factor has been increased imports of computers assembled overseas by U.S. computer makers. "As recently as the summer of 1990," he observes, "the U.S. had a $5 billion real trade surplus in computers. Now, it is running a $17.5 billion deficit."

Despite the computer trade deficit, Brinner believes that overall demand for capital goods will finally bolster the expansion this year. Rising at a similar clip as equipment imports but from a much larger base, capital spending should contribute about half a percentage point to the economy's growth, according to DRI/McGraw-Hill projections.

This pickup in investment is crucial, warns Brinner, because the outlook for U.S. exports of capital goods is no longer buoyant. Equipment exports actually fell in real terms last quarter for the first time in two years, and recessionary conditions overseas suggest that they face sluggish growth in the year ahead—narrowing America's trade surplus in such items. Indeed, many observers attribute May's sharp decline in nondefense capital-goods orders to slowing demand abroad.

HAPPINESS IS LOOKING IN THE MIRROR—AND SEEING YOUR BOSS

One of the side effects of the turmoil in labor markets in recent years has been a significant rise in the ranks of self-employed workers. And, judging by the findings of a new National Bureau of Economic Research study, that may add up to an increase in job satisfaction, as well.

In the study, economists David Blanchflower and Andrew Oswald analyzed data drawn from surveys of young British workers in 1981 and U.S. workers of various ages from 1972 to 1990. They found that at least 80% of British and American workers reported they were satisfied with their current jobs.

In both countries, however, those working for themselves were the most satisfied. In Britain, 46% of the self-employed said they were "very satisfied," vs. 29% of those employed by others, while in the U.S. the numbers were 63% vs. 47%. The two researchers conclude that self-employment has a major positive effect on job satisfaction.

WHY THE EQUITY FAN CLUB WON'T BE LOSING MANY MEMBER

With corporations floating new uity issues at a record pace long-term-bond borrowing picking steam, some Wall Streeters are w dering whether the market can conti to absorb a growing supply of new s and bond issues. Not to worry, s economist Bruce Steinberg of Me Lynch & Co.

Steinberg notes that net corpo borrowing is still unusually low an likely to remain so for several m years as corporations continue to w off the debt excesses of the 1980s. though gross debt issuance by busi has been high, most of it has repres ed refinancing activity rather than debt. In fact, total net corporate grew at less than a 1% pace in the quarter. Thus, as a share of cash f combined net debt and equity fu raised by corporations continue to ru low levels previously seen only at bottom of recessions.

Meanwhile, the significance of business credit slowdown for the st market is that it has spurred consum to seek higher returns on their savi The reduced supply of new fixed-inc assets and low interest rates foste by sluggish corporate borrowing, n Steinberg, have encouraged househ to channel more of their savings to e ties purchased directly or through m al funds. "Barring a sudden spik interest rates," he says, "investor mand for equities is unlikely to be s in the near future."

NOW, PINK SLIPS ARE SHOWING UP IN HIGHER ECHELONS

Downsizing is moving up the co rate ladder, reports Drake B Morin Inc. While middle managers main the main focus of job cuts in m agement ranks, the consulting firm ports that such activity has slowed, the fallout from restructuring spre ing to higher-echelon staff and op tions positions. Of the more than 2, executives for whom DBM provided reer-transition counseling last year, represented corporate staff and 10% resented operations and office offic These were roughly double the perc ages registered by DBM for such ex tives in 1990.

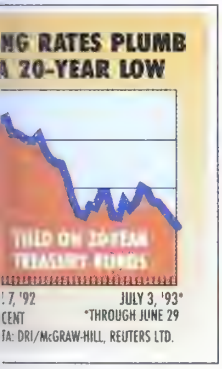
12, 1993

BY JAMES C. COOPER AND KATHLEEN MADIGAN

HE SCORE LOOKS BAD NOW, UT A SECOND-HALF RALLY IS POSSIBLE

s the economy unraveling as badly as the last-place New York Mets? You wonder. The leading indicators are falling. New and unfilled orders in manufacturing drying up. New-home sales plunged in May. And in e, consumers continued to lose confidence.

o be sure, the economy was not capable of maintaining robust 4.1% growth rate of real gross domestic prod- in the second half of last year, but it also is not as k as suggested by the insipid 0.7% advance posted in first quarter. But now, second-quarter growth is shap- up to be closer to 2% than 3%, and some of the latest raise serious questions about the economy's ability to eve growth in the 3%-to-3.5% range so widely ex- ed for the second half.



However, while the recent data are less than encouraging, the scouting report for the rest of the year is cautiously optimistic. That's especially true for consumers, whose sour confidence readings belie the upbeat trend in consumer spending this spring. That means manufacturers are likely to face a little better second half than their disappointing first half.

addition, with long-term interest rates dipping to a ear low, attractive mortgage rates will continue to sup- both housing demand and refinancing activity (chart). rate on 30-year Treasury bonds closed at 6.67% on 28, the lowest rate since long bonds of that maturity an to be issued in 1977.

NOTHER ALLY IN HE BOND ARKET

Long rates are down from 7% in mid-May on the belief that the economy is not growing fast enough to generate inflation- ary pressures and on optimism that a def- cutting budget bill will emerge from Congress.

ong rates are more than a full percentage point below high of eight months ago, and much of the stimulus that drop will continue to filter through the economy he coming months. Cheaper financing bolsters the ook for capital spending and demand for big-ticket umer goods, although uncertainty surrounding the inistration's budget and health-care proposals con- es to hamper decision-making.

hat uncertainty is a big factor depressing consumer idence, which is slipping yet again—the third time vo years. According to the Conference Board's latest survey, the June index of consumer confidence fell to 58.9, from 61.9 in May (chart). The indexes covering the present state of the economy and its prospects six months from now each took small dips in June.

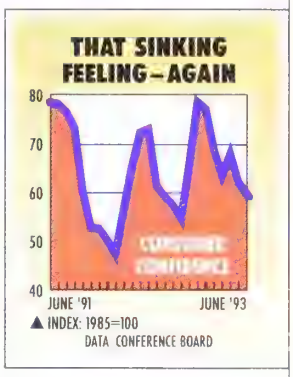
Most of the hand-wringing is over the economy's future. Expectations have fallen in five of the past six months. Jobs continue to be a major concern for consumers, despite the better employment data this spring. And looking down the road, households are increasingly fearful that higher taxes will cut into their future incomes.

Despite the fall in June, though, consumers are actually more upbeat in their assessment of the current economy's health than they were in the second half of 1992. In particular, consumers think the job market was more stable in June than it was in the latter half of 1992.

CONSUMERS ARE BLUE BUT STILL SPENDING

Part of that better feeling may reflect continued improvement in consumer incomes. Personal income in May rose 0.6%, thanks to a 1% advance in wages and salaries. Even after adjusting for taxes and prices, real disposable income was up a solid 0.4% in May.

Consumers didn't lift their spending by as much, though: Inflation-adjusted purchases of goods and service rose only 0.1% in May, but that followed a 0.9% gain in April. And early reports for June shopping are encouraging. The *Johnson Redbook Report* says that department-store sales rose by a comfortable 0.7% in June.



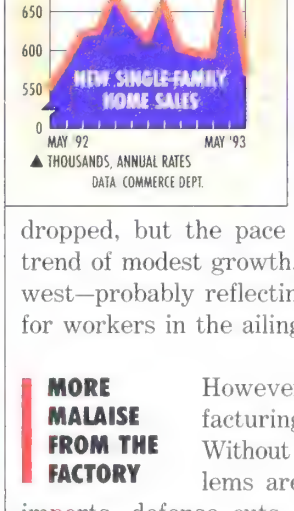
That means real consumer spending is on track to grow at an annual rate of about 2.5% in the second quarter, even if June sales were flat. Although that pace of buying probably isn't enough to offset the drag on real GDP expected from a worsening trade deficit and a slower pace of inventory growth, consumer spending last quarter performed far better than its 0.8% showing in the first three months of this year.

Moreover, income growth will remain healthy as long as hiring does. And the recent drop in long-term rates is likely to touch off another wave of mortgage refinancings, freeing up cash for many households. Lower mortgage rates also mean that demand for new homes should bounce back from its disappointing showing in May.

Indeed, home sales were expected to retrace some of the 21.5% jump posted in April, but the May drop was

surprisingly large. Sales of single-family homes plunged 21% in the month, to an annual rate of 571,000 (chart).

Was home buying that terrific in April and that terrible in May? Both showings probably exaggerated reality. When smoothed out over time, home sales are holding up far better than the May data suggest. Over the past three months, sales of new homes are running slightly ahead of their pace of the previous three months.



Also, existing home sales were up 4.6% in May, to a 3.6 million pace. Strength in both the new-home and resale markets suggests increased consumer spending on home-related durable goods this summer.

The May housing numbers, however, point to divergent regional trends. Home buying in the West posted the third gain in a row. Sales in the Northeast dropped, but the pace simply returned to its yearlong trend of modest growth. Buying was weakest in the Midwest—probably reflecting the questionable job prospects for workers in the ailing factory sector (page 26).

MORE MALAISE FROM THE FACTORY

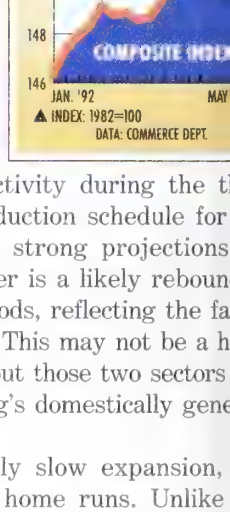
However, the recent weakness in manufacturing must be put into perspective. Without a doubt, the factory sector's problems are real: sagging exports, growing imports, defense cuts, a shrinking order backlog, and fewer new orders as retailers trim their inventories.

However, while manufacturing now accounts for less than 19% of GDP and less than 17% of nonfarm employment, it has a disproportionately large presence in the data. In particular, manufacturing activity directly accounts for nearly half of the 11 components in the government's index of leading indicators.

The leading index, designed to foreshadow the economy's course, fell 0.3% in May, the third decline in the five months (chart). As in recent months, three fact sector measures figured prominently in the drop: or for consumer goods, unfilled orders, and delivery ti Other downers were consumer expectations, mate prices, and an uptick in jobless claims.

Manufacturing's malaise may well extend into the s mer, based on the downbeat May data on orders, s ments, and inventories. Factory orders for durable nondurable goods dropped 1.4% in May, while shipm fell by 0.5%. The order decline was the third in a row, first three-month slide since the 1990-91 recession.

Moreover, the order backlog shrank by 0.9%. At current shipment rates, manufacturers now have the smallest supply of production in the pipeline in 15 years. Also, because inventories rose 0.3%, the ratio of stockpiles to sales rose to 1.50, the highest in six months. All this gives manufacturers little incentive to lift either output or payrolls.



However, several factors are likely to buoy manufacturing activity during the t quarter. Detroit's ambitious production schedule for quarter, including exceptionally strong projections truck output, is one plus. Another is a likely rebou demand for household durable goods, reflecting the fa able outlook for housing demand. This may not be a h ing-and-autos economy anymore, but those two sectors account for a lot of manufacturing's domestically gene ed strength.

To be sure, in this historically slow expansion, economy is unlikely to hit any home runs. Unlike Mets, though, with solid fundamentals of job and inc growth and low inflation and interest rates, the pote is there for a comeback in the second half of the sea

THE WEEK AHEAD

CAR SALES

Tuesday, July 6

New domestically made cars probably sold at an annual rate of 6.9 million during the last 10 days of June, according to the median forecast of economists surveyed by MMS International, a division of McGraw-Hill Inc. That means that for the entire month of June, cars sold at about a 6.8 million pace, down only slightly from 6.9 million in May. Light trucks probably sold at a 5.1 million pace for all of last month, the same impressive sales rate posted in April and May. The ongoing strength of sales of U. S.-made vehicles is an important sign of some momentum gathering in this expansion. In particular, Detroit's plans to increase production could add significantly to gross domestic product in the third quarter.

INITIAL UNEMPLOYMENT CLAIMS

Thursday, July 8, 8:30 a.m.

New filings for state unemployment insurance benefits likely stood at about 350,000 for the week ended July 3. That wouldn't be much different from the 353,000 claims filed in the week of June 19. The claims number will be the first indicator of the July labor markets, coming after the July 2 release of the June employment report. However, data for the week ended July 10 will be skewed by state office closings in observance of Independence Day. In general, jobless claims have been running at a lofty range of 335,000 to 350,000 throug of the spring.

INSTALLMENT CREDIT

Thursday, July 8, 3 p.m.

Consumers probably added about $2 lion to their debt loads in May, say MMS economists. Increases in car bu and personal loans taken out at c mercial banks offset the weaknes borrowing suggested by flat retail s in May. The expected May advance lows heftier increases of $3 billio March and $2.3 billion in April. Mos that was in revolving credit. Howe disposable income has grown at a m faster clip than consumer borrowing As a result, debt as a percentag aftertax income continues to shrink.

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SUMMERTIME BLUES

MANUFACTURING SLUMP IS JUST WHAT THE ECONOMY DOESN'T NEED

Just six months ago, U. S. manufacturers were girding for a healthy recovery. Buoyed by the election of President Bill Clinton, improving economic numbers, and cheap money, consumers and corporations alike went on a buying spree. Factory orders jumped 7% during the final months of 1992. Production of refrigerators, automobiles, and other industrial goods took off. As a result, the economy grew a vigorous 4.7% in the year's fourth quarter—and confidence for 1993's outlook zoomed.

Now, America's largest manufacturers wonder if those vibrant last days of 1992 were a mirage. With consumer confidence wilting and purchasing managers reining in spending, manufacturing is suddenly back in the dumps. The Commerce Dept. on June 30 announced that factory orders fell 1.4% in May, the third consecutive monthly decline. And the Conference Board's business confidence index dipped 9 points in the second quarter, to 57, its lowest level since late 1991. Adding to the gloom: a soaring trade deficit for the U. S., caused by deep economic funks in Europe and Japan. For bears such as HSBC Holdings PLC economist Lacy Hunt, the upshot is clear: "The manufacturing sector is back in recession."

That could turn out to be far too negative an assessment. Indeed, many executives continue to predict a recovery for their businesses during 1993's second half. And there's plenty of bounce in the economy: The U. S. auto industry is on a roll. And sales of existing homes are rising, thanks partly to low rates.

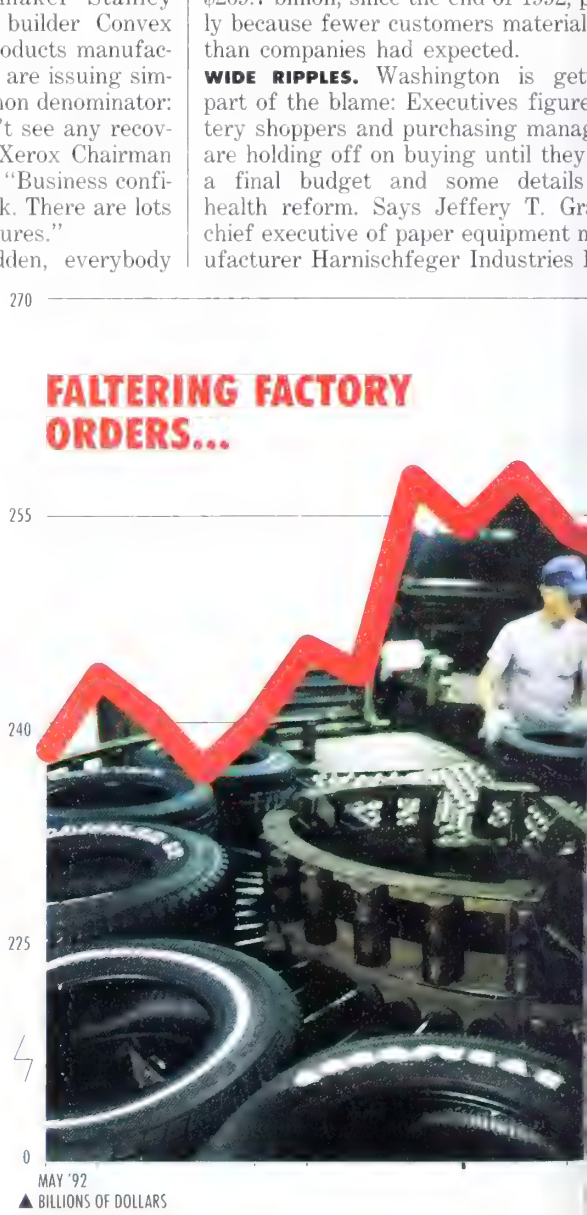
But few manufacturing execs have a positive word for the second quarter: Indeed, many are warning of weak sales and earnings. 3M Co., an economic bellwether, has cautioned that slack demand across its 40,000-product line will cause second-quarter earnings to fall short of Wall Street's expectations, though the quarter will be up over last year. Now, one after another, manufacturers as diverse as Xerox, Eastman Kodak, Cooper Tire & Rubber, toolmaker Stanley Works, supercomputer builder Convex Computer, and paper products manufacturer Georgia-Pacific all are issuing similar warnings. The common denominator: weak demand. "We don't see any recovery in the U. S.," says Xerox Chairman and CEO Paul A. Allaire. "Business confidence is reasonably weak. There are lots of deferrals of expenditures."

Indeed, all of a sudden, everybody seems to be deferring all over the pl
New-home sales plunged 21% du
May, vs. a 22% increase in April.
retail inventories have jumped 3.5%
$269.7 billion, since the end of 1992, p
ly because fewer customers material
than companies had expected.

WIDE RIPPLES. Washington is get
part of the blame: Executives figure
tery shoppers and purchasing manag
are holding off on buying until they
a final budget and some details
health reform. Says Jeffery T. Gr
chief executive of paper equipment m
ufacturer Harnischfeger Industries I

SIGNS OF TROUBLE DOWN AT THE PLANT

Weak demand has put industrial buying in a holding pattern that some fear may not lift anytime soon, especially if Washington hikes taxes



e manufacturing recovery is on hold l these issues are addressed."

edical manufacturers, in particular, worried about health reform. "Until rhetoric ends and the air clears, the stry is going to be paralyzed," says walk (Conn.)-based U. S. Surgical). Chairman and Chief Executive n C. Hirsch. USS recently warned its second-quarter numbers would weak, partly because hospitals are ing down inventory and waiting for th reform before buying new equip- t.

ie ripples are being felt throughout economy. Manufacturing may now esent less than 19% of gross domes- roduct, but it remains large enough ive economic data a solid whack n the numbers head south. On June or instance, the Commerce Dept. an- iced that its index of leading eco- ic indicators had dropped 0.3% in , largely because of a shrinking log of unfilled manufacturing or- and a drop in new orders for con- er goods. That suggests that the na- s total economy may grow at less the 3.5% clip many economists were icting for the second half of 1993.

w economists are crying recession n—at least not yet. Consumer ding, for instance, grew at a 2.4% n April and May, according to Commerce. Manufacturers such as the Big Three auto makers and truck supplier Cummins Engine Co. are coming out of their long funk, thanks to those rates as well as pent-up demand for replacement vehicles. Companies are still spending heavily on new information technology. And some industries, including consumer appliances, look faint now only because they grew so vigorously earlier this year.

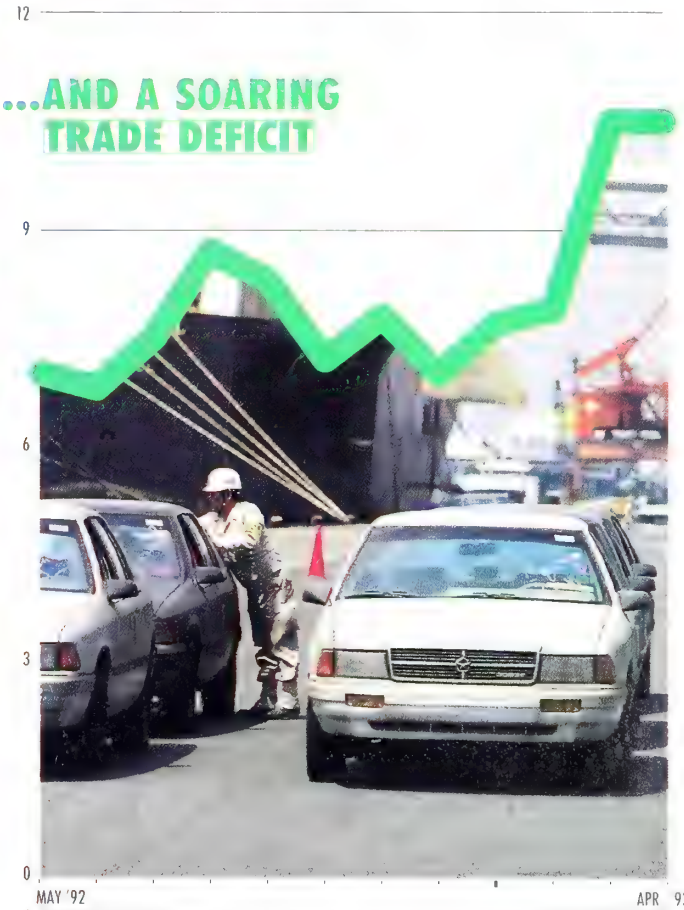
Still, the overall weakening of the economy is unmistakable. And a few bears worry that the impact of the Clinton Administration's planned tax hikes, when combined with sluggish manufacturing, could badly derail the economy in 1994. "An overall recession is a risk for next year," warns DKB Securities economist Philip Braverman.

DECLINING EXPORTS. Maybe the single biggest drag on the manufacturing economy is the sagging markets in Europe and Japan. Minicomputer manufacturer Data General Corp., for instance, recently said its third quarter, which ended on June 26, fell below expectations because of sluggish sales in recession-ravaged Europe. As a result, Wall Street analysts increased their loss estimates for the Westboro (Mass.) company to $13 million, three times higher than previous estimates. Overall, anemic overseas economies pushed the April trade deficit to $10.49 billion as U. S. exports declined $511 million. And there's little hope of help from the Group of Seven trade summit in Tokyo, which isn't expected to forge a strong stimulus or trade package (page 44).

Meanwhile, defense trimming is adding to the gloom at home. Military-equipment production, which accounted for 5% of GDP during the first quarter, is falling at an annual rate of 6%. Defense-related companies are shedding a staggering 12,000 jobs per month.

Will the manufacturing slowdown last? Some executives can't shake off their worries. Ronald Best, chief executive of totes inc., the Loveland (Ohio) marketer of umbrellas and other accessories, notes that his order book for winter and Christmas isn't nearly as full as it usually is at midyear. "We see the stores procrastinating on their purchase orders," waiting to see if the economy rebounds, he says. A lot of economists still figure that trend will go into reverse later this year as confidence regains momentum. If they're wrong, however, old Saint Nick could start to seem more real by yearend than the rebound of '92.

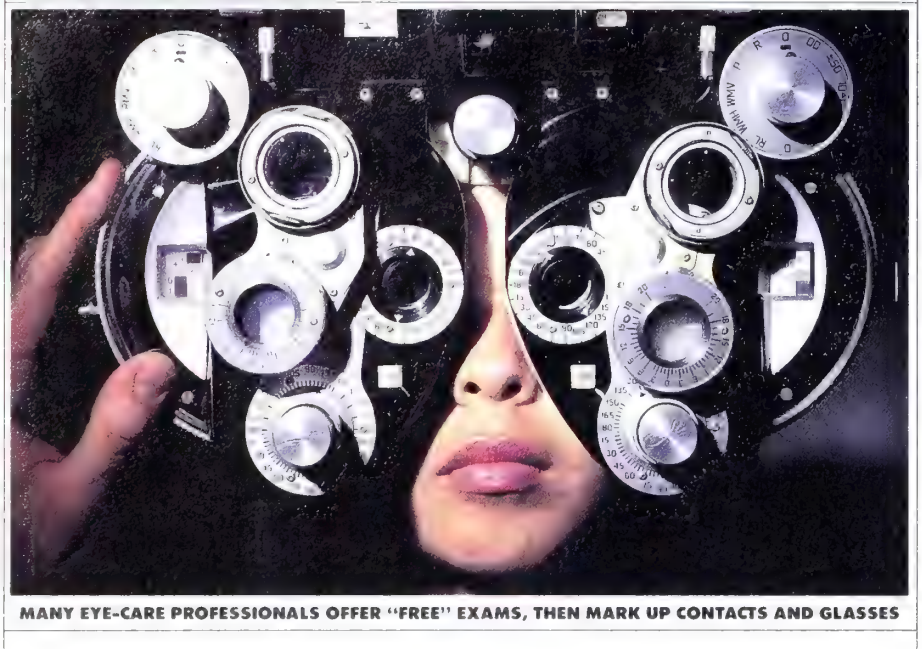
By Kevin Kelly in Chicago, with Zachary Schiller in Cincinnati, Tim Smart in Connecticut, and Kathleen Madigan in New York



IF DOLLARS APR. '93

MAY '92 APR. '93
▲ BILLIONS OF DOLLARS
DATA COMMERCE DEPT

INVESTIGATIONS



MANY EYE-CARE PROFESSIONALS OFFER "FREE" EXAMS, THEN MARK UP CONTACTS AND GLASSES

CONTACT-LENS SELLERS JUST DON'T SEE EYE-TO-EYE

Upstart mail-order outfits vs. optometrists and manufacturers

When Richard King lost a contact lens recently, he called Lens Express, a Deerfield Beach, Fla., mail-order company. But since his prescription was more than two years old, Lens Express declined to sell him a lens without a new exam. And the eight optometrists King contacted near his West Texas home refused to release his prescription so that he could order directly.

Lens Express finally found King an optometrist—167 miles away—who gave him an exam and called in the prescription. King's savings by going mail order: perhaps $300 over two years, he says. But he's steamed at what he sees as a maze of greed and conflict of interest. "Optometrists do have a responsibility to follow up on first-time contact lenses," he complains. "But the replacement source is none of their business."

HIGH MARKUPS. King's story is the product of a fray involving contact-lens manufacturers, eye-care professionals, and, ultimately, the estimated 25 million wearers of contact lenses in the U. S. At issue: Can lens makers and doctors legally restrict how their eye-care products are sold? The Florida Attorney General is investigating possible civil antitrust violations, particularly by manufacturers that won't sell to mail-order companies and some retailers. The Federal Trade Commission is conducting its own inquiry.

It's a chaotic battle, and the absence of well-defined federal regulations isn't helping. The Food & Drug Administration regulates the manufacture of contact lenses and labels them a "medical device," to be dispensed by professionals or by prescription, but leaves states to see to the details. The FTC, for its part, requires that eyeglass prescriptions be released to consumers, but it says nothing about contact lenses. Meanwhile, only 13 states require that ophthalmologists and optometrists release contact-lens prescriptions to consumers.

The government probes promise to heighten the turmoil that is already engulfing the lens industry. Manufacturing costs have plummeted, and the introduction of disposable products has weakened consumer loyalty to their doctors as sources of supply. Lenses are viewed increasingly by purchasers as a commodity, and they no longer command the fat margins that once did.

So it's no surprise that mail-order fits and other outlets—among them count retailer Wal-Mart Stores and warehouse chains as Costco and Club—have begun competing with independent optometrists and optic who once monopolized distribution. shot ourselves in our own foot," Ronald P. Snyder, a Fort Lauderdale tometrist. "When contact lenses c out, we marked them up such that allowed someone else to get in." N mail order alone accounts for about of the $1.8 billion annual retail con lens market, and other retailers' sha growing.

Lens Express, the largest Amer lens mail-order operation, says tha sales have doubled every year s 1986, to $40 million this year. growth, however, hasn't gone unnoti The Texas Attorney General is s Lens Express for deceptive trade p tices, an action that the company tends was instigated by the Texas B of Optometry, which denies it. And P ident Brian O'Neill says that opto trists and opticians have led attempt several states to enact legislation would allow lens manufacturers to only to eye-care professionals, shut out companies like his.

THE BLACKLIST. One such attempt year, in Florida, caught the attentio the Florida Consumer Action Netw which lodged a complaint with the s Attorney General. The result: a w ranging investigation that has sou documentation and testimony f across the industry. The Florida inv gators are looking into manufactur refusal to sell lenses, directly or thro distributors, to mail-order houses discounters that don't have eye-care fessionals on-site.

Manufacturers don't deny that t seek to limit distribution. Indeed, three largest contact-lens manufac ers—Bausch & Lomb, CIBA-Vision tics, a unit of C Geigy, and Vistako Johnson & John subsidiary—all that they won't se mail-order outfits cause those compa don't have on-site fessionals to " lenses on patie The same policy plies to some retai "This is a health is period," says Ha O. Johnson, presi of Bausch & Lo contact-lens divis

is is a medical device that
n direct contact with the
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deed, B&L requires distrib-
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klist of mail-order houses,
metrists, and outfits it
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companies.

T OUT? Mail-order compa-
contend that these policies
driven by economics, not
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ement lenses rarely are fit-
by professionals. Optometrists can
e prescriptions with annual expira-
dates, if they wish, in order to
e sure that patients return for eye
ns.

r their part, eye-care professionals
they worry that consumers will get
criptions filled incorrectly else-

Lens Express claims eye doctors commonly refuse to send patients' prescriptions

where, or that patients won't return for follow-up care. "A patient takes the prescription and keeps reordering until they have a problem," says Steve R. Ali, a Manhattan optometrist. Optometrists complain of the lack of federal or state oversight of mail-order lens companies, which they say have little regard for prescription expiration dates—or don't require prescriptions at all.

Barring more uniform regulation, consumers can't count on getting a great deal from anyone. BUSINESS WEEK contacted six mail-order companies to inquire about ordering a box of six Acuvue lenses. Three of the outfits didn't require a doctor's name or written prescription as long as the lens specifications could be supplied. And prices varied widely, as did membership and mailing fees. The bottom line: None of the mail-order lenses were much cheaper than those ordered from a Manhattan optometrist. Some of them even cost more. Lens-wearer, beware.

By Gail DeGeorge in Miami and Joseph Weber in Philadelphia, with Mark Maremont in Boston and Rochelle Shoretz in New York

THE ONLY DIFFERENCE IS WHEN YOU THROW THEM AWAY

t's the tail end of the soft contact lens manufacturing line at Bausch & Lomb's Rochester (N. Y.) facy. A white-clad worker carefully ints each tiny lens into a plastic blispack filled with saline solution. en, some lenses are sealed with a e film and loaded into boxes marked Quence 2. Another set gets covered h purple film and is ffed into boxes rked Medalist. on, patients und the U. S. will paying $7 to $9 pair for the Seence contacts and to $25 for a pair of dalists.

MEDALIST: CHANGE EVERY THREE MONTHS

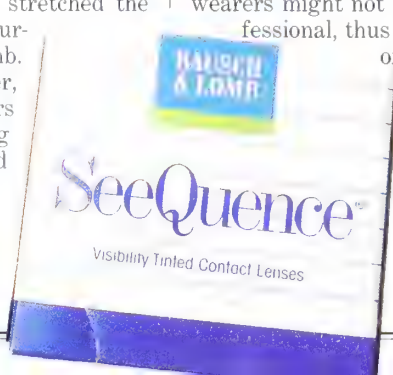
What's the difference? ne. Zilch. Zero. The two products tain precisely the same lens. Yet doctors tell patients to throw away Quence lenses after a week or two, le Medalist wearers use their lenses up to three months. It's a vivid stration of the contact-lens indus-s little-known secret: Most manuurers market several brand names h widely varying prices, but there's en little or no technical variation.

CK CHANGES. This curious situation function largely of huge leaps in nufacturing efficiency, which have ven the average cost of making a s to less than 50¢, from $2 or more five years ago. At the same time, absence of significant technical advances and a stagnant number of lens wearers threatened disaster for lens makers. Their solution: Sell each wearer more product by getting them to replace lenses more frequently than the old standard of once a year.

In mid-June, Johnson & Johnson's Vistakon unit announced 1-Day Acuvue, trumpeted as the first lens that can be discarded every evening. Vistakon executives acknowledge there's virtually no difference between 1-Day Acuvue and the original Acuvue one-week disposable, introduced in 1988; 1-Day Acuvue simply covers a narrower range of prescriptions. New manufacturing technology has allowed J&J to get the patient's price, including fees, down to $1.50 a pair, vs. $8 a pair for the older Acuvue.

Still, no company has stretched the repackaging strategy further than Bausch & Lomb. Long the industry leader, the company a few years ago found itself lagging behind the trend toward frequent replacement. Rather than reinventing the wheel, it decided to jump into disposables using the same lens material and basic design as in its older lenses. Indeed, B&L recently revamped its seven-year-old Optima FW line to make it identical to SeeQuence 2 and Medalist. The difference: Optima FW, costing $70 a pair, is recommended for replacement every year.

SEEQUENCE: DISCARD AFTER A WEEK OR TWO



Harold O. Johnson, president of B&L's contact-lens division, makes no apologies for charging different prices for essentially the same lens. "It's simply a volume discount for the patient," he says. "If you buy 104 lenses in a year, you should pay less per lens than somebody buying 20 or 30." The way Johnson sees it, the important factor is not the per-lens cost but the patient's annual tab: slightly higher for lenses that are replaced more frequently.

What happens if patients try to beat the marketing shell game? Anyone could buy six pairs of SeeQuence lenses for $50, enough to last several years if cleaned and disinfected regularly. One danger, of course, is that wearers might not see an eye-care professional, thus risking eye damage or infection. Another: Lens makers could lose millions in profits. It's not clear what concerns the industry more.

By Mark Maremont in Rochester, N. Y.

BOTTOM PHOTOGRAPHS BY STEVE WINTER BEAM, TOP

NEWSPAPERS

WHAT'S BLACK AND WHITE AND BLUE AND YELLOW—AND LESS IN THE RED?

A more serious *USA Today* could get its first taste of profits this year

When Gannett Co. Chairman Allen H. Neuharth threw a coming-out party for *USA Today* in 1982, he spared no expense. President Reagan, Cabinet members, congressional leaders, and hundreds of other dignitaries munched on delicacies flown in from all 50 states at a lavish Capitol Hill party. But when Neuharth's brainchild turned 10 last September, John J. Curley, Neuharth's successor as chairman, simply assembled staffers for a buffet lunch in the company dining hall. Some observers figured the affair was kept low-key to avoid drawing attention to the $700 million in losses the paper has racked up over the course of a decade.

The way 1993 is going, though, *USA Today* may not have to be so modest at its next party. While other papers are struggling through an ad slump, the self-proclaimed "Nation's Newspaper" is enjoying robust growth: Ad pages are up 22% through May (chart), and circulation has jumped 6%, to an average of 1.9 million.

The big issue now: When will *USA Today* finally turn an operating profit? The paper fell short of its earlier call that it would show black ink by the late 1980s, and Publisher Thomas Curley, the chairman's brother, isn't ready to make any predictions. But Duff & Phelps Corp. analyst James C. Goss thinks that rising ad sales plus a drive to slash overhead "could move *USA Today* into the black" this year. Goss sees the paper earning up to $10 million, about what it lost last year. Most analysts figure that *USA Today*'s improved results will help Gannett boost its earnings this year by 15%, to $400 million, on a 5% revenue increase, to $3.7 billion.

QUICK TURNAROUND. Any earnings at all could signal a turning point in *USA Today*'s struggle for credibility on Madison Avenue. For years, the paper was an anomaly: a newspaper that tried to sell ads like a national magazine. Ad buyers couldn't tell how long readers spent with the paper or how devoted they were. And magazine advertisers had to redo their ads—at great expense—to fit its newspaper format. Most media buyers "didn't have 'national newspaper' in their [ad] budget," admits *USA Today* Editor Peter S. Prichard. "We had to create that [category], and it took time."

But now some media buyers believe the market may be shifting in *USA Today*'s favor. As the recession forced companies to cut their marketing dollars, many advertisers dropped soft image ads in favor of narrowly targeted ones tied to new-product introductions, sales promotions, or news events. That plays to *USA Today*'s technological strengths: As a daily, it can turn ads around on a dime.

During last summer's Olympics, Eastman Kodak Co. used *USA Today*'s satellite uplink to run ads with color photos taken from the previous day's events. And McDonald's Corp. recently sent ad copy featuring a playoff-game photo of basketball star Michael Jordan at p.m. for the next day's editions—far er than rivals can take ads. "The r of marketing have changed so that product now fits a lot of client nee says Charlie Rutman, executive president for Backer Spielvogel B Worldwide Inc., a New York ad age

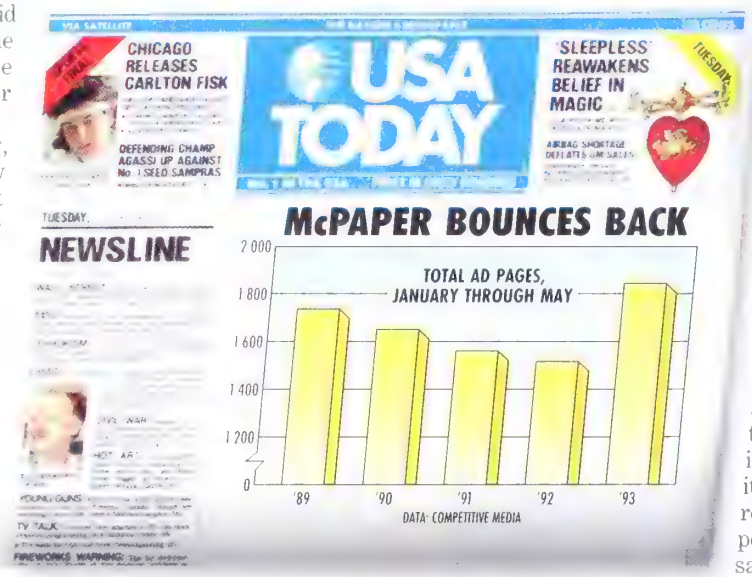
Publisher Curley, moreover, has c plans to steal advertisers from m zines. He has established an in-h production department that redes magazine ads to fit *USA Today*'s for at its cost of $2,000—which Cu claims is as little as 5% of what agen bill. Now, 10% of *USA Today*'s ads produced in-house.

HARD NEWS. Meanwhile, Prichard i lencing critics who deride *USA Tod* short, upbeat pieces as fast-food jou ism—dubbing it "McPaper." He is ing readers more hard news on po and the economy. Sports and busi coverage are strengths. *USA Toda* cently scooped the petition on corpo shakeups at IBM and ple Computer Inc. "It more serious publica than it was under harth. Clearly, they're ting more emphasis hard news," says Ce Michigan University J nalism Professor John Hartman, author of a book on *USA Today*.

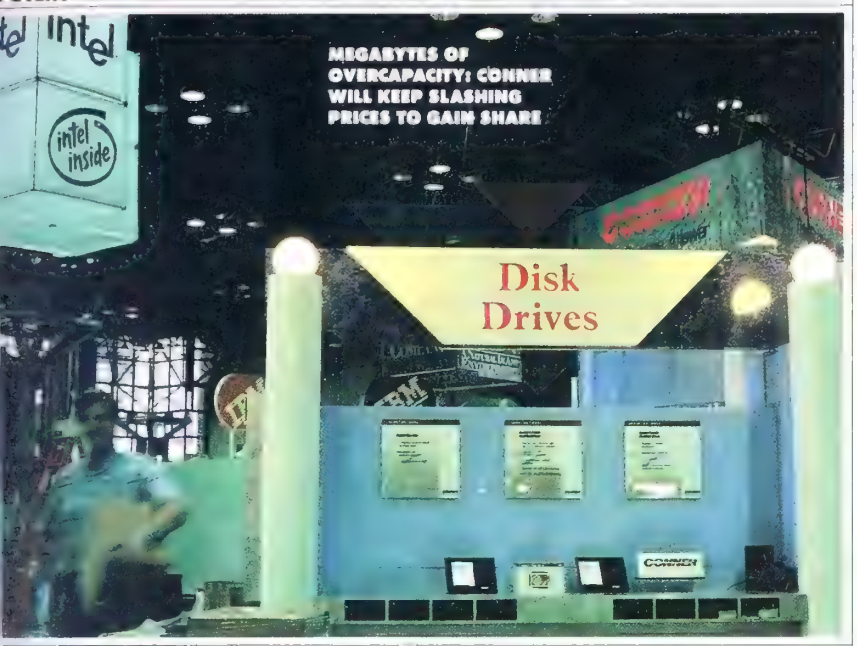
Curley also has taken ax to *USA Today*'s cost st ture, which ranks among industry's highest becaus its nationwide distribution recently closed two of the per's 36 printing sites saved more money by sw ing or renegotiating contracts wit contract printers. A 17% plunge in n print prices since 1988 has helped s *USA Today*'s production and distribu costs from 80% to 67% of the total about 50% for big-city newspapers.

Despite these efforts, *USA Today* never be a financial powerhouse. Re hikes in newsprint prices could set its tentative push into the black. analysts believe the paper's high costs will prevent it from ever po more than a 10% profit margin—hal newspaper-industry norm. Under rosiest scenario, it will take more th decade for Gannett to break even o investment in the paper. For though, Gannett executives are just ing that their current good fortune up for two more quarters—and McP starts to make McMoney.

By Dean Foust in Arlington



Long derided for its short, upbeat stories, the paper now devotes more space to politics and the economy



MEGABYTES OF OVERCAPACITY: CONNER WILL KEEP SLASHING PRICES TO GAIN SHARE

.OOD ON IE TRACKS

· mother of all price wars hits the hard-disk-drive industry

aurence R. Hootnick is tearing out his hair. As chief executive of Maxltor Corp., he engineered the hard- drivemaker's remarkable turnnd from near death last year. Now, a few months later, he's watching essly as a cutthroat industry price sucks his profits dry. And he isn't nly one suffering. On June 30, Con-Peripherals Inc. warned that its secquarter loss would top the $12 milanalysts were expecting. By midevery other major drivemaker will rt losses or lower earnings for the quarter. Says Hootnick: "It's caracross the industry."

ice wars are nothing new in the outer-disk drive market. Indeed, rapnover in products, technology, and omers almost guarantees frequent iem. But in this war, with the $24 n drive industry coming off its most table year in five, companies are ing prices more aggressively than Since January, wholesale prices on disk drives have plunged at least -more than triple the usual rate of ne. Stocks of the top six makers gone south: They're down 46% to from their peaks of the past year.

LE EFFECT. The price wars have aly landed some companies in serious ble. On June 23, Kalok Corp. filed hapter 11 protection from creditors. industry insiders say Maxtor is aphing potential buyers, including South Korea's Samsung Group and U. S. rivals. Hootnick won't talk about that but says he would consider a merger at the right price. Meanwhile, the troubles are rippling through the rest of the electronics industry. On June 22 and 23, drive-component suppliers Cirrus Logic Inc. and Read-Rite Corp. warned that drops in orders may cause them to report losses for the quarter that ended in June. Expectations are so low that Conner's news barely budged its stock, which was up ¼, to 9¾, on June 30.

Why the sudden mega-war in megabytes? Hot personal-computer sales cooled slightly in the first quarter, leaving drivemakers with excess inventory. Leading PC makers such as Compaq Computer Corp. and Dell Computer Corp. also unexpectedly grabbed market share from Far East PC cloners, prompting the Asians to sell their excess drive inventories to distributors at bargain prices. Meanwhile, as Microsoft Corp.'s Windows operating software and associated programs eat up more megabytes, customers are demanding bigger drives. The result: a glut of small drives, fire-sale prices, and falling profits.

In this price war, moreover, even the prices of bigger disk drives, once a profit haven, are plummeting. Since January, for instance, the average price of a 340 megabyte drive has fallen 34%, to $280 (chart). That's terrible news for drivemakers, points out Dataquest Inc. analyst J. Philip Devin, because such drives were expected to provide plentiful profits later this year. "It's getting very bloody, and it's going to get worse," predicts John Monroe, director of mass-storage products at drive distributor Compac Microelectronics Inc. in Fremont, Calif.

Who started the fight? Maxtor and Western Digital charge that Conner did when it started aggressively marketing to distributors as well as selling directly to computer makers. Connor is "taking all the profit out of this business," fumes Hootnick. But Conner Chief Executive Finis F. Conner calls that charge "ridiculous" and says his company has been "losing sales left and right" to rivals who undercut its prices.

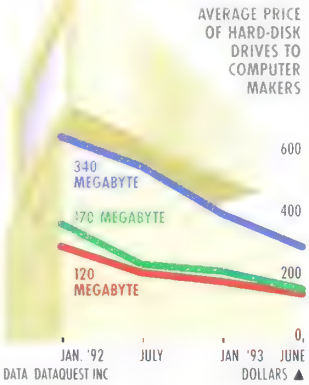
When will the slashing end? No company wants to back down because drive technology progresses so fast that excess drives must be sold fast or they become dated and lose even more value. Conner, for one, appears hell-bent on gaining share: "We are going to get more aggressive," he vows. Yet analysts expect the drive market to continue to weaken as the pace of PC sales growth slows. Another ominous sign: Digital Equipment, Hewlett-Packard, and IBM all recently started selling drives, too.

FEEDING FRENZY. The likely result, most analysts figure, is that stronger companies will start eating weaker ones. The three largest drivemakers—Seagate Technology, Conner, and Quantum—have plenty of cash—$1.5 billion combined—to go shopping. And the next three biggest companies, Maxtor, Micropolis, and Western Digital, would make juicy prey. Their combined market value is just $450 million, and together they have $260 million in cash on hand.

Mergers aside, drivemakers are pinning their hopes for better profits on lower-cost, higher-capacity drives due out this fall. Production is already down 35% at some companies since the peak last year, and by late this year supply could start to match demand—stabilizing prices. The drivemakers "have been taken to the limit," says Compaq CEO Eckhard Pfeiffer. Now it's a question of which companies can hold out until things get better.

By Robert D. Hof in San Francisco, with Peter Burrows in Dallas

HARD TIMES IN HARD DRIVES



PHOTOGRAPH BY JSA QUINONES BLACK, STAR CHART BY RAY VELLA BW

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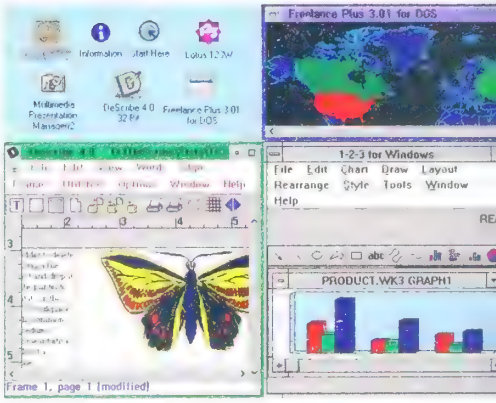

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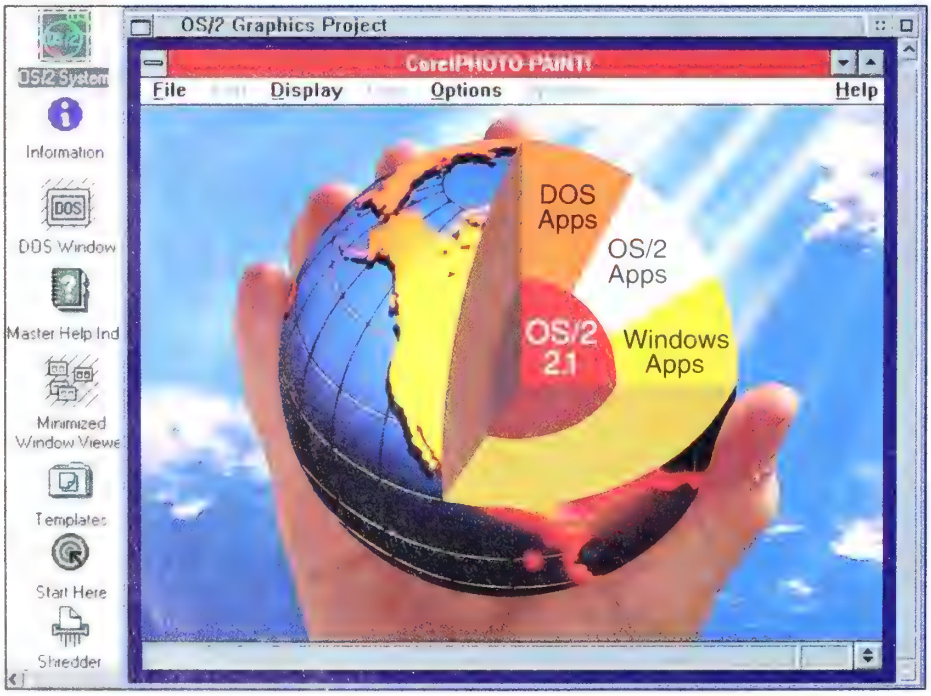

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THE COURT

LEGALLY, AT LEAST, 'BUSINESS IS NO WORSE OFF'

This Supreme Court season leaves it with small wins but no major gains

Maybe Corporate America didn't get everything it wanted. But it didn't lose its shirt, either. So it was with more relief than resignation that U. S. companies marked the June 28 close of the Supreme Court's term. "Business," says Washington lawyer Carter G. Phillips, "is no worse off."

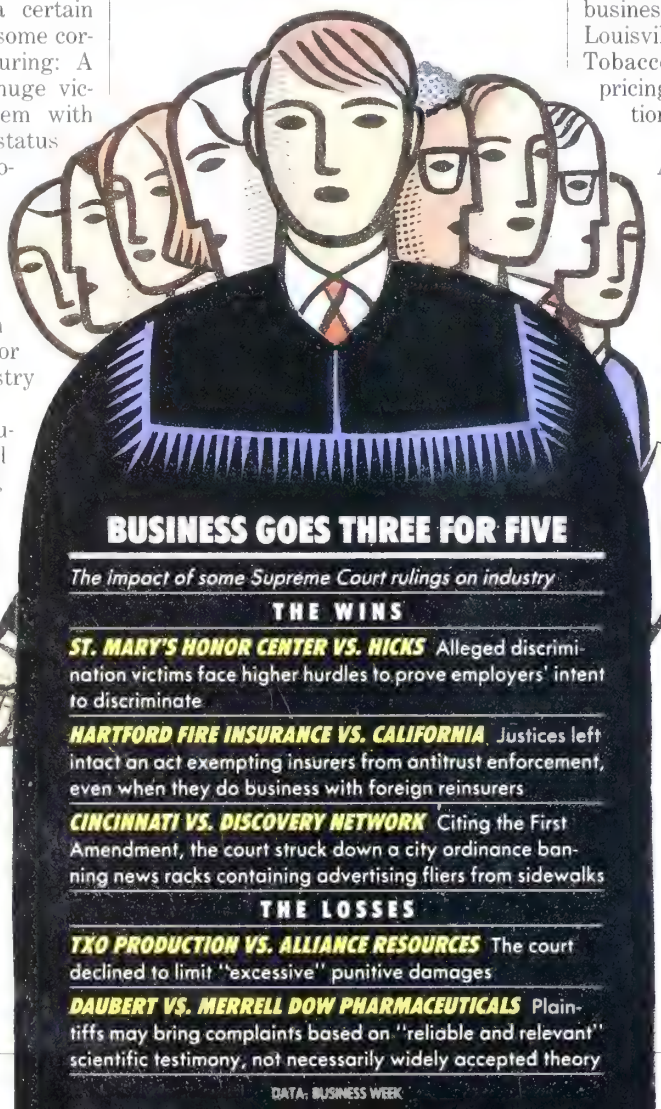
Victories on such big issues as punitive damages and product liability eluded industry, which had hoped to turn back the tide of costly litigation. But the high court broke no new ground for consumers and their lawyers, either. And in less prominent cases involving antitrust, taxes, and civil rights, business interests managed small triumphs (table).

"STATUS QUO COURT." This time around, the court's rulings suggest a certain caution regarding business. To some corporate attorneys, that's reassuring: A court that doesn't give them huge victories isn't likely to stick them with stinging defeats, either. "It's a status quo court," says Alan M. Slobodin of the conservative Washington Legal Foundation. "It doesn't make great changes but decides things at the margins." Perhaps most important, the steady-as-you-go approach provides the kind of stability for business planning that industry longs for.

Only the court's ruling on punitive damages truly frustrated business interests. In that case, decided on June 25, TXO Production Corp. in Dallas had challenged a $10 million punitive-damage award by a West Virginia jury—526 times the actual damages that the jury found TXO had caused in a land dispute. But the Supreme Court, for the third time in five years, failed to curb such awards.

The decision did little to clarify a confusing ruling of two years ago that established what many lawyers call vague procedures for determining punitive damages. Without clear guidelines, "lawsuits become a lottery," sighs Richard L. Horstman, a lawyer at Houston's Marathon Oil Co., which bought TXO in 1991. In the wake of their judicial loss, businesses now will lobby states for legislative action to limit awards.

Business also wanted limits set on scientific evidence that could be introduced in court, arguing that only mainstream theory should be introduced to reduce the number of frivolous suits. Instead, in a case involving Marion Merrell Dow Inc., the justices said on June 28 that all reliable and relevant scientific testimony was acceptable. The ruling reinstated a suit brought against Marion by children who claimed their mothers' use of the company's Bendectin drug during pregnancy had caused their birth defects.



BUSINESS GOES THREE FOR FIVE

The Impact of some Supreme Court rulings on industry

THE WINS

ST. MARY'S HONOR CENTER VS. HICKS Alleged discrimination victims face higher hurdles to prove employers' intent to discriminate

HARTFORD FIRE INSURANCE VS. CALIFORNIA Justices left intact an act exempting insurers from antitrust enforcement, even when they do business with foreign reinsurers

CINCINNATI VS. DISCOVERY NETWORK Citing the First Amendment, the court struck down a city ordinance banning news racks containing advertising fliers from sidewalks

THE LOSSES

TXO PRODUCTION VS. ALLIANCE RESOURCES The court declined to limit "excessive" punitive damages

DAUBERT VS. MERRELL DOW PHARMACEUTICALS Plaintiffs may bring complaints based on "reliable and relevant" scientific testimony, not necessarily widely accepted theory

DATA: BUSINESS WEEK

Those two highly visible lo though, obscured some victories business. Perhaps the biggest-ticke ing: a decision that lets companies ing from media concerns to banks brokerages write off the value of scriber lists or customer accounts. will affect at least $10.5 billion in assets previously barred from amo tion by Internal Revenue Service p

The court ruled with business in trust as well. Insurers scored a p triumph against 19 states that charged them with conspiring to back commercial coverage of env mental and other liabilities. The rejected the states' argument that i ance companies' relationships with eign insurers, which back the U. S. panies' policies, aren't protected by McCarran-Ferguson Act of 1945, w generally exempts the industry antitrust attacks. But the justices a a lower court to decide whether th dustry's alleged boycott fell under a row exception in that law.

Other antitrust cases reinforced conservative court's reluctance to business tactics. In one, it declared Louisville-based Brown & Willia Tobacco Corp.'s below-cost ciga pricing represented vigorous com tion, not predatory behavior.

The justices also solidified Amendment protections for mercial speech, such as a tising. For instance, they st down a Cincinnati ordin that had banned from sidew metal boxes containing ads

REASSURING. Finally, busi got further protections in rights suits. In the pas worker would win such a if an employer's planation of a tion was judge sham. Now, em ees must find that employers act intended to discrimi

This term's wins reassure companies the court is an ally. And expected addition of Bader Ginsburg is unlike change the justices' appr in business cases. Altho Ginsburg is apt to push more civil rights prote for workers, her caut judging in most fields se to ensure that business won't be much worse off the court's new justice board.

By Catherine Yang Washington

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DEMOGRAPHICS

'POSTCARDS' FROM THE CENSUS?

The bureau's proposed stripped-down form could hurt business

THE NEW SURVEY WOULD NOT COUNT SUCH DATA AS INCOME AND EDUCATION

The 1990 Census offered something for everyone—to be mad about. Rural states and cities alike complained that their populations weren't counted accurately. Minority groups charged that the Bush Administration's refusal to adjust for undercounts was aimed at diluting their constituents' voting strength. And Congress was steamed at the $2.6 billion price tag.

For 2000, the Census Bureau has vowed to do better. But it may not get the chance. Angry House budget-cutters voted on June 24 to slash $15 million out of the $23 million planning budget for the 2000 Census, a move the full House was expected to ratify on July 1. The legislators' orders: Concentrate on a stripped-down head count with just enough information to draw new congressional districts for 2002.

LATEST BLOW. The result could be a disaster for business—especially demographics-hungry marketers. The "postcard census" that some in Congress envision wouldn't measure such items as household income, educational status, or commuting patterns (table). That would wipe out basic data for millions of such decisions as where to locate stores, how to recruit workers, and how to skew sales pitches by region. "Businesses use this data every day—whether they realize it or not," says Ken Hodges, director of demography for Claritas/NPDC Inc., an Alexandria (Va.) market-research firm.

Even before the House Appropriations Committee gutted the census budget, the 2000 Census was due for major changes. After striving for 200 years to count every American once a decade, the Feds have been overwhelmed by the diversity of the population, the high cost of tracking down illegal immigrants and the homeless, and the public's growing distrust of government. "We've gone as far as we can in trying to count every person," says Susan M. Miskura, chief of the bureau's Year 2000 research staff.

Instead, the Census Bureau plans to use statistical samples to measure some groups, saving money to concentrate on counting hard-to-reach inner-city, r minority, and immigrant populati The 59-question "long form" maile one-sixth of all households in 1990 m be broken into several shorter fo sent to smaller samples. And the bu hopes to adjust for undercounts be releasing data, heading off controve

But sampling might wipe out "small-area" data. Surveys might y average incomes for counties—but reliable income data for towns or ne borhoods. "When we [choose a loca for] a store, most of the customers within a four-mile radius, and county ta's not much use," says Joan G. Fi director of research for Dayton Hu Corp., the big Minneapolis-based reta States need small-area data to allo federal aid and to plan schools, sew and roads.

MORE FOCUS. The Census Bureau h to reassure critics with an extensive out of its new methods in 1995. But House budget cut, if adopted by the ate, wouldn't leave enough money the tests. Congressional leaders, their part, maintain that they're tr to help the Census reau focus on wh important to the reducing undercou Appropriators sug that taxpayers footing the bill data that's sold at gain prices to b ness. "Academ government, and b ness are sinking census under weight of all the in mation they're tr to get," argues Re sentative Thomas Sawyer (D-Oh chairman of House census subc mittee. Sawyer w like to use a b bones census, bac up with surveys produce more quent data betw head counts. But ers wonder whet the extra cou would get funds.

Despite the thr census users ar storming Capitol "Business ne weighs in on the sus until the very last minute," say House staffer. If census users wait time, they may find their chance to in ence the "millenial decennial" long g

By Mike McNamee in Washing

A SIMPLER CENSUS

How the 2000 "postcard" form would differ from 1990's version

THE POSTCARD WOULD REQUEST...

Number of people in household
Sex of each person
Marital status
Date of birth
Race
Home ownership, size, value
Hispanic origin

...BUT IT WOULD OMIT

Household income
Years of schooling completed
Occupation
Housing details (age of house, plumbing, cost of utilities)
Mortgage and equity loans
Citizenship
Immigration status
Ancestry or ethnic origin
Languages spoken at home
Disability status
Employment
Commuting patterns
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STRATEGIES

NT PHONES HOME

Northern Telecom is scrambling to pacify its core U.S. customers

During his four years as chief executive of Northern Telecom Ltd., Paul G. Stern launched a blistering overseas expansion. By Mar. 1, when Stern resigned, the Canadian company's sales outside North America had quintupled, to $2.1 billion, or 25% of last year's $8.4 billion total. But now, there's evidence that in its eagerness to go global, Northern gave short shrift to its core U. S. customers. "They've dropped the ball at home," says Michael Arellano, an analyst at market researcher Northern Business Information.

Mounting U. S. customer dissatisfaction is a key reason why Northern warned investors on June 25 to expect a second-quarter loss. The problem is centered on Northern's core product: digital central-office switches, the guts of modern phone systems. During the 1980s, Northern's attention to quality, price, and service helped it grab much of the switch market from American Telephone & Telegraph Co. But recently, customers have complained about the software in Northern's switches, which are essentially computers. At least one major U. S. phone company has had serious problems with software bugs. An executive at this company, who asked not to be identified, thinks the problem may lie in inadequate testing: "The perception was they weren't doing their homework," he says. Since then, the company has slowed its orders from Northern. While Northern declines to comment on the quality issue, CEO Jean C. Monty confirms that the company's problems "principally reflect lower-than-expected public switching sales and continuing price pressures."

CEO MONTY (LEFT) FACES LOSSES AFTER PREDECESSOR STERN'S EXPANSION

COMPLETE BREAK. It's not a problem Northern can afford to ignore. Last year, switches accounted for half its revenues and the bulk of operating profits. Moreover, the June 25 warning of the loss—coming after last year's record earnings of $536.4 million—"scared the hell out of in tors," says Bun Warburg ana Frederick Larkin June 29, North stock had plun 26%, to $27.25, a for the year.

Monty didn't r more prodding. June 30, he nounced execu changes that complete the break the Stern era. Among them: a new c at Bell-Northern Research, where sw software is developed. Stern, who s Mar. 1 had been NT's nonexecutive ch man, is also gone. His duties are be assumed by O. Bradford Butler, who ex-chairman of Procter & Gamble knows how to please customers.

The changes aren't over. Northe board appears likely to approve a w off, related in part to its switching p lems, before the July 27 release of ond-quarter results. And it may t until 1995 for Northern to finish rev ing its switch software to make it problem-prone. Still, Northern has ready learned the most important les Keep your core customers happy.

By William Symonds in Toronto, Bart Ziegler in New York

EXECUTIVE SUITE

WESTINGHOUSE'S NEW WARRIOR

Can retired Pepsi honcho Michael Jordan turn the behemoth around?

When Michael H. Jordan retired early from PepsiCo Inc. last year, associates expected him to relax and pursue his eclectic interests, from art to reading Italian history. Instead, Jordan moved into financial dealmaking as a partner at the investment firm of Clayton Dubilier & Rice Inc. One of the projects he worked on—the restructuring of LEXMARK International Inc., a printer and typewriter unit spun off by IBM—intrigued him. Slashing corporate bureaucracy helped double LEXMARK's production. Better yet, he says, employees "were turned on by the freedom."

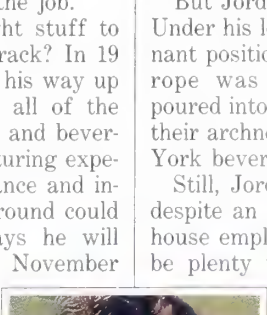
Now, at 57, Jordan is getting a chance to put those lessons to work in a big way. On June 30, he was named chairman and chief executive officer of troubled Westinghouse Electric Corp. It's a job that will tax all his skills. He must bring Westinghouse's tattered finances into order and push the company into foreign markets—all while tearing down 100 years of fiefdoms built up within the Pittsburgh giant. The company searched for months before tapping Jordan as CEO, and the new chieftain admits he thought hard before taking the job.

Does Jordan have the right stuff to get Westinghouse back on track? In 19 years at PepsiCo, he worked his way up to head Frito-Lay and then all of the company's international food and beverage operations. His manufacturing experience is limited, but his finance and international marketing background could prove invaluable. Jordan says he will maintain a plan started last November under which Westinghouse is selling off old-line electrical businesses representing about one-third of its $12 billion in revenues. The move is necessary to offset some $5 billion in losses at its troubled financial division. That done, Jordan must scout new markets.

TOP MARKS. With Westinghouse's core power generation and defense businesses facing slow growth at home, the best opportunities are abroad. And Jordan has plenty of experience there: He led PepsiCo's charge into foreign markets in 1980s, raising international food sale 10 years to $4 billion from $300 mil "He got an A from every director," s former board member Robert S. Stra

But Jordan did suffer some setba Under his leadership, PepsiCo's pred nant position in Russia and Eastern rope was undermined as Coca-C poured into both markets. "They allo their archnemisis to stroll in," says N York beverage consultant Tom Pirk

Still, Jordan clearly likes action. despite an easy-going manner, West house employees worry that he plan be plenty tough. LEXMARK hacked 60% of its managerial j and Jordan does little to lay fears that similar re tions are coming at W tinghouse. "A company Westinghouse has to through these kinds steps in today's envi ment," he says.



Jordan's strengths are Westinghouse's weaknesses

That's a far cry from plans to "merrily play and do deals" Jordan until recently. But it r be just what Westingho needs.

By Stephen Baker Pittsburgh, with Laura Z in New York

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In Business This Week

EDITED BY JULIE TILSNER

HEADHUNTER HEAVEN

The revolving door to corporate corner offices is spinning wildly this summer. Here are some of the most prominent changes at the top, just in June:

HERBERT BAUM No. 2 Campbell Soup exec jumps to be CEO of Quaker State

VAUGHN BRYSON Collegial style, but disappointing results, so Eli Lilly's board voted their CEO out.

ANDREW DWYER Lost control at JWP, then lost his job.

ROBERT GREENHILL Critics questioned his management style at Morgan Stanley. He'll try again at Smith Barney.

JAMES McDONALD He has run Gould and Prime Computer; now he'll take a shot at Scientific-Atlanta.

JOHN SCULLEY He's staying at Apple, but not as CEO.

ERVIN SHAMES Food was his first love; he's returning there as president of Borden.

A BIG SKIPPED STEP MAY STALL NAFTA

▶ Happily ever NAFTA? Not so fast. A Washington judge has thrown a monkey wrench into Clinton Administration efforts to wrap up a free-trade pact among the U. S., Canada, and Mexico by year-end. U. S. District Judge Charles Richey ruled on June 30 that the Bush Administration ignored the 1969 National Environmental Policy Act's requirement that an environmental-impact statement be prepared. The North American Free Trade Agreement is likely to have "significant environmental effects" along the U. S.-Mexico border, he said. The judge ordered the White House to prepare an impact statement before submitting legislation to Congress. That could delay the pact nine months or more. The White House says it will appeal.

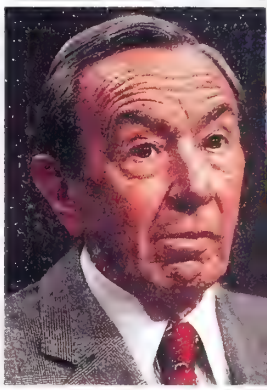
RYDER BIDS *ADIEU* TO AIRCRAFT PARTS

▶ "Back to basics" has been Ryder Systems' theme for years. Since 1988, the Miami trucking company has shed $1.1 billion in assets. The restructuring took another major step on June 30, when Ryder announced it would spin off its $1.2 billion aircraft-engine-parts and service business to shareholders by year-end. Thanks to the airline industry's woes, the unit earned $25.1 million in 1992, down sharply from $46.5 million in 1991. The move doesn't come cheap: Ryder will take a $169 million after-tax second-quarter write-down.

FLORIDA THWARTS INSURERS' ESCAPE

▶ The insurance business isn't often this exciting. Earlier this year, two dozen home insurers opted to limit or stop selling coverage in Florida after being hit with $16 billion in claims from Hurricane Andrew. No dice, said the state, which banned insurers from dropping policyholders until after the 1993 hurricane season. On June 29, one insurer, Prudential Property & Casualty, filed a federal lawsuit against Florida, saying the law violates its contractual rights—namely, the right to drop 25,000 policyholders. If Prudential wins, other insurers are likely to follow. If Florida wins, look for other states where insurers are cutting coverage to pass similar laws.

HOTLINE—OR PARTY LINE?



WARREN CHRISTOPHER

It looked like a precision military operation. But backstage, the June 26 U. S. missile attack on Baghdad was less than organized. As Secretary of State Warren M. Christopher jetted from Kennebunkport, Me., after briefing George Bush, his aides were frantically trying to inform world leaders of the attack in advance of President Clinton's 7:40 p.m. television address. In the confusion, one aide had German Chancellor Helmut Kohl awakened in the dead of night, unaware that the President had informed Kohl hours earlier.

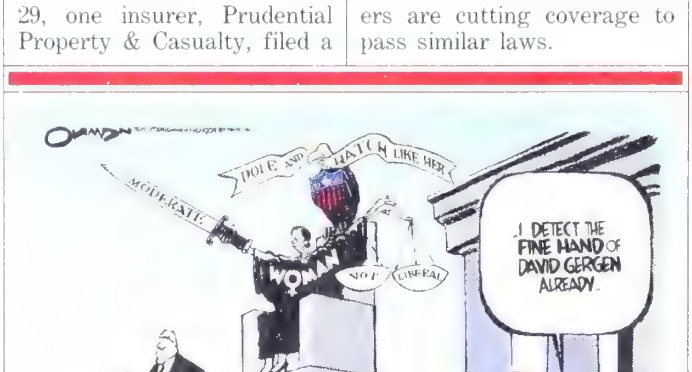
Other aides urged that the Palestine Liberation Organiza be contacted, via the Tunisian Foreign Minister, to prevent kind of PLO condemnation that followed Operation De Storm. The PLO should be told "not to be stupid again staffer urged. Christopher himself was trying to reach guest in Minnesota," in an aide's words, presumably Jord King Hussein, who was at the Mayo Clinic.

How does BUSINESS WEEK know all this? Because Chr pher's staffers failed to use secure phones. Their conversat from the plane with Washington were caught by a "scanne an electronic hacker who monitors calls. The scanner prov a copy of the tape to BUSINESS WEEK, which has verifie contents. "We don't comment on the contents of private versations," says a State Dept. spokesman.

By Mark Lewyn in Washin

THAT'S CHAIRMAN GOLUB TO YOU

▶ Let no one question vey Golub's power at An can Express. On June AmEx announced that G would get the chairman' tle from Richard Furlau only five months after tal over as CEO from James inson III. AmEx' board O. K.'d Golub's protegé, frey Stiefler, as presid The moves suprised s AmEx watchers who had pected Golub's rise to ch man to take longer. The chitect of Golub's conque believed to be Furlaud, had served as nonexecu chairman since Februa "It's an overwhelming r firmation that what Har has done for shareholo has been constructive," s John Byrne, a former bo member.



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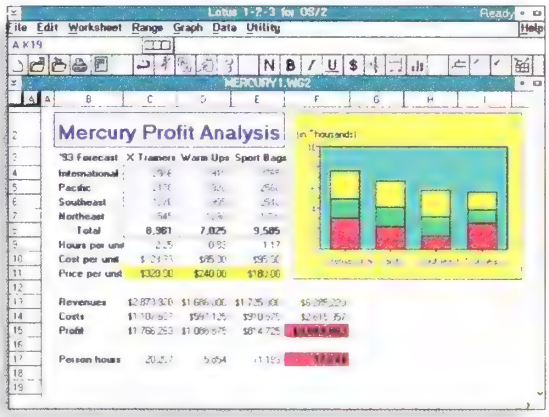

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EDITED BY STEPHEN H. WILDSTI

THE HOUSE'S FRESHMAN CLASS STARTS TO GET FRISKY

It looked like a classic Capitol Hill mismatch. An upstart band of freshmen, led by Representative Sam Coppersmith (D-Ariz.), took on the leaders of both parties in late June to kill funding for an advanced Energy Dept. nuclear reactor. With strong support from the 114 first-termers, Coppersmith and company won, 267-162. Savings for the taxpayers: a modest $32 million. Still, the rebellion was a stunning example of what the new members of Congress can do when they work together.

The 66 Democratic freshmen have had a rough first six months. Elected as reformers, they were attacked as sellouts after meekly going along with their leaders at organizational meetings. The newcomers "have fallen in the thrall of the leadership since Day One," sniffs the Heritage Foundation's David M. Mason. But now, first-term Democrats are flexing their muscles—and even finding common cause with GOP classmates. The result: more pressure for spending cuts and stronger support for reform of campaign finance and the House's creaky procedures.

FINGERHUT: AT ODDS WITH DEMOCRATIC BRASS

Recently, a bipartisan group of freshmen bucked their leaders to strip former Presidents and House Speakers of most government perks. First-termers also played key roles in the House defeat of the Superconducting Super Collider and the near-death experience of the space station. Another confrontation looms in their effort to force Congress to live by the job-safety and other employment rules it applies to the private sector. And freshman Democrats have created a "fiscal caucus" to identify targets for future budget strikes. "There's a very, very strong momentum in the freshman class to cut spending," says first-termer Herbert C. Klein (D-N. J.).

Some think the Democratic freshmen have not gone far enough. While House GOP first-termers bullied their leaders into limiting the number of years Republican members can serve on committees, Democrats wouldn't mount the c lenge. A rare departure came this spring when Representa Leslie L. Byrne (D-Va.) tried, over the objections of party l ers, to remove subcommittee chairmen who voted aga President Clinton's economic plan. "The freshmen Democ have been conformers, not reformers," says Representa Rod Grams (R-Minn.).

CLEAR MESSAGE. Certainly, many first-term Democrats main cautious team players. Bucking the leadership even ly carries a price. "I'm not going to have a highway name me in the foreseeable future," quips Coppersmith. But s new members are ready to take risk. Representative Eric D. Finge (D-Ohio), who is at odds with his ty's brass over term limits and line-item veto, thinks his classm are getting bolder with experience takes some time to develop the w ing relationships to get things do he says. "Once you've been around track, you're better able to influ the debate the next time around."

Looking ahead to the 1994 elect has also focused the freshmen's mi A key moment for many first-t Democrats came when they reluct ly voted for an unpopular energy tax—only to see Cli trade it away in a deal with Senate Democrats. "They w forced to walk the plank on the Btu tax," says Representa Stephen Horn (R-Calif.). "Many are sitting in marginal tricts. They're starting to say: 'Hey, what about reelectio

Whether motivated by deep conviction or political surv Democratic freshmen are starting to send a clear messag Hill leaders and the White House. Although they're willin work within the system, they won't be taken for granted. less the leadership listens, followers may be harder to fin the months to come.

By Richard S. Dun

CAPITAL WRAPUP

REGULATORS

William B. Gould, the Stanford University law professor tapped by President Clinton to head the National Labor Relations Board, has some revolutionary thoughts about labor-management relations. For one, he would allow a union to organize when it has the support of 20% or 30% of workers vs. the majority now required. But business can probably relax a bit. Nearly all of the changes favored by Gould—including a business-backed reform making it easier to create labor-management teams, require deep changes in labor law. That's difficult because Senate Democrats would have to win five Republican votes and hold all of their own to avoid the constant threat of a filibuster. And while the NLRB has some latitude in interpreting statutes, its rulings are subject to court review, and judges have tended to keep the board on a short leash.

The nomination faces a fight in the Senate, though Gould should prevail. A likely bone of contention is his desire to stay on as a member of Labor Secretary Robert B. Reich's advisory commission on labor law reform while chairing the NLRB. But the big issue will be Gould's strong pro-union views. Confirmation, worries a business lobbyist, will "tilt the balance of the board very much to organized labor."

TECHNOLOGY

The Defense Dept.'s high-tech search arm, the Advanced Resea Projects Agency, has a long record civilian spin-offs, especially in electr ics. But nondefense applications were high priorities during the Bush A ministration, which was hostile to a moves that aided specific industri Clintonites, who favor industrial poli have a dramatically different outlo Says a top Pentagon official: "If anyo requests funds for technology w strictly military applications, they b ter have a strong case." Adds anoth "Dual use is really the attitude n It's making the old guys nervous."

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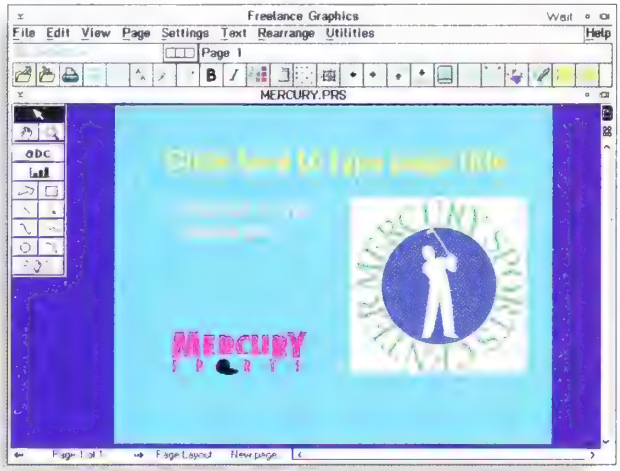

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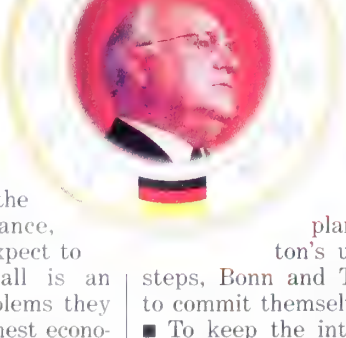
SUMMIT OF THE DAMNED

THE NOT-SO-MAGNIFICENT G-7 LEADERS ARE LIMPING INTO TOKYO

It looks like a sequel to the horror classic *Night of the Living Dead*. But no, those specters are actually the leaders of the world's seven leading industrial nations, prepared for a trek to the Tokyo economic summit. The extraordinary political weakness of the seven chiefs is likely to make for a gruesome show when they gather July 7-9. "This is the lamest group ever," observes a U. S. official who has helped prepare American Presidents for every summit since the annual gabfests began in 1975. "Getting an [advance] agreement on anything has been extremely difficult."

Bloodied by their domestic political difficulties, the Group of Seven leaders will find themselves unable to rise to the challenge. With low inflation and slow or no growth in the G-7 countries, the leaders might have had an opportunity to push through bold stimulus. Instead, they'll settle for modest accords on economic policy and trade.



That the top politicians in the U. S., Japan, Germany, France, Britain, Italy, and Canada expect to reach any consensus at all is an achievement, given the problems they have running the world's richest economies. President Clinton has been beaten up by Congress and has lost significant public support. Host Kiichi Miyazawa now heads a caretaker government. French President François Mitterrand's long reign is ending on a sour note. Britain's John Major ranks as the country's least-popular leader in modern history. The disruption caused by German reunification has battered Chancellor Helmut Kohl. And Canada's Kim Campbell and Italy's Carlo Ciampi are virtual unknowns.

The summit's final communiqué, to be released on July 9, will most likely offer a modest list of achievements:

■ To stimulate economic growth, the G-7 is expected to suggest that Japan further increase government spending to spur its economy and reduce its trade surplus. Germany will be asked to make larger cuts in its budget deficit, allowing the Bundesbank to lower interest rates. But the words may ring hollow—since Japan has already announced plans to increase domestic spending and Germany has just unveiled a two-year, $28 billion deficit-reduction plan. Despite Washington's urgings for stronger steps, Bonn and Tokyo are unwilling to commit themselves to more.

■ To keep the international trade-liberalization talks from collapsing, the G-7 will likely cut a market-access deal that would eliminate tariffs on a variety of manufactured goods. But this falls far short of a sweeping accord on all trade—including services and agricultural products. It also raises new w
ries that the so-called Uruguay Ro
of the General Agreement on Ta
& Trade may culminate in failur
the end of the year.

> THE GROUP WILL SETTLE FOR MODEST ACCORDS, NOT PUSH FOR BOLD STIMULUS

Just a month or so ago, reachi
broad trade accord in
kyo seemed almost a
tainty. "For some ye
heads of governmen
the G-7 meetings h
solemnly agreed tha
the end of that year,
would get a GATT se
ment," says John Ma
"It's beginning to so
a bit thin." He says
critical for participant
the summit meeting to come up w
something: "Unless the leaders of
seven move toward a GATT settlem
there will not be one. What lies at
other side of the hill is potentially v
damaging."

■ To show renewed commitment to
economic and political refo
in Russia, the
summit participants
will promise to deliver the $28 billio
assistance they pledged to Russ
President Boris Yeltsin in April. Yel
who will join the summiteers on Jul
will not be getting an additional $2
lion in G-7 cash that President Clin
sought to help privatize Russia's st
run industries. The other leaders,
are suffering from donor fatig

ght that his figure was a little too rous. But Clinton has managed to e up with $500 million in G-7 grants Yeltsin to bring home, and an addi- al $500 million in trade credits is a ibility.

good times, this might be enough ake for a better-than-average sum- performance. But Japan and Eu- are in their worst slumps since ld War II, and the U. S. recovery is slowest in 50 years. More decisive n is called for, but sick economies sapped the G-7's political will. "Eu- has lost its sense of purpose, and at malaise, one country blames an- r," says Dominique Moïsi, deputy ctor of the French Institute of rnational Relations in Paris. "In a Tokyo will be an exercise in dam- limitation."

NK-IN-CHIEF. The most damaged par- ant is host Miyazawa, who lost a idence vote in Japan's Diet on June Although a failure to enact political rms led to his downfall, the econo- played a large part. The Organiza- for Economic Cooperation & De- pment forecasts that Japan's nomy will grow a paltry 1% this r. "He can still behave as though as ideas or a vision. But instead of g a leader, he will merely be an r reciting lines," says Yasunori e, professor of political science at University in Tokyo.

iyazawa will have lots of company is misery. Prime Minister Major sides over a British economy expected to grow at a mere 1.8% pace in 1993, after

straight years of decline. terrand's Socialist Party lost rol of the government in March r it was routed in parliamentary tions—and a double-digit unemploy- nt rate contributed mightily to the eat. Kohl has been humbled by an nomy expected to contract 2% this r. Italian Prime Minister Ciampi, a etaker who took over the scandal- cked government on Apr. 25, is not ected to last long. And Canadian Prime Minister Campbell, on the job just since June 25, could also be tossed out in national elections this fall.

By comparison, Clinton looks like a political powerhouse, even though he recently garnered the lowest approval rating ever scored by a new President. In the aftermath of the U. S. missile attack on Baghdad, an ABC/Washington Post poll showed Clinton's approval rating jumping to 46%, but he held only a 38% favorable rating for his handling of the economy. The President also can point to his progress in Congress on passing a five-year, $500 billion deficit-reduction package—something other summit nations have long urged. "We're coming with something in hand on economic policy that is bolder than what either Japan or Germany has done," boasts a senior White House official. He concedes, though, that "the fact that Clinton comes as the strongest leader tells you how pathetic the others are."

Although he is a new player on the international stage, Clinton may end up dominating the summit, and not just because he's the only one who can state unequivocally that he'll be around at least through 1996. This is Bill Clinton's kind of affair—sort of a Renaissance Weekend for the elite. For 48 hours, the Wonk-in-Chief will try to dazzle his colleagues with his charm and knowledge of government details. And he will attempt to allay their fears that his main use for them is as whipping boys when he gets in trouble on the domestic political front.

It will take every bit of Bill Clinton's powers as a world-class schmoozer to prevent the summit from ending up a global embarrassment. One of the most contentious disputes is between Washington and Tokyo: They're fighting about ways to reduce Japan's $50 billion trade surplus with the U. S. Hopes of reaching a presummit understanding that would provide the U. S. with greater access to Japanese markets were all but dashed when negotiators deadlocked on June 28.

WHERE'S THE IMPACT? Then there is European resentment of the high German interest rates that have helped finance reunification at the cost of hobbling neighbors' economies. The U. S. is upset that Europe won't support direct intervention to halt the bloodshed in Bosnia. And each nation has a different industry that it wants to protect under a new GATT agreement: financial services for Japan, agriculture for France, dairy products for Canada, and textiles for the U. S.

The prospect of another unproductive G-7 confab raises the annual question: Why bother? The traditional answer is that summits may not have immediate impact, but over time they build personal relationships between leaders and add a bit of pressure on countries to overcome their parochial national interests. But the sluggish growth and high unemployment facing the world this year make this summit different. And, unfortunately, it's likely to be remembered as a missed chance for action at an important turning point.

By Owen Ullmann, with Douglas Harbrecht in Washington, Bill Javetski in Paris, Neil Gross in Tokyo, and bureau reports

WHAT'S ON THE TABLE IN TOKYO

RUSSIAN AID The G-7 will likely confirm $28 billion in 1993 aid and discuss up to $2 billion more for privatizing state businesses

ECONOMIC GROWTH With G-7 economies expected to grow just 1.3% in 1993, vs. 1.6% in 1992, Japan will be pressured to stimulate and Germany to lower rates

TRADE The G-7 will take small steps forward, but there's little hope for a global trade deal by yearend

DEVELOPING NATIONS Japan will push a new plan to provide up to $125 billion in foreign aid to developing nations over five years

BOSNIA The leaders plan to condemn the bloodshed but will sidestep concrete actions

DATA: BUSINESS WEEK

IC, OCYWISE FROM TOP: PHOTOGRAPHS BY KLAUS REISINGER/BLACK STAR; RICHARD BAKER/KATZ/SABA; T. CHESNOT/SIPA; BRAD MARKEL/GAMMA LIAISON

From CHIP

Hyundai continues its commitment to advanced technologies a innovations. In 1992, we introduced the next generation 6 **DRAM chips,** firmly establishing ourselves as a new force in electronics.

Hyundai's Excel, Sonata and Elantra have gained fame in the world's a markets since 1986, setting the stage for the introduction of the **HCD-2 spo car** in 1993. This truly unique coupe-st sports car embodies Hyundai Motor's vis in performance and aesthetics.

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Hyundai, as a leader in the world's shipbuilding industry, has delivered over vessels including some of the world's largest supertankers. e recently launched **Moss-type LNG carrier** is esult of our leading-edge technologies innovative designs.

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EGYPT

COULD EGYPT BE THE NEXT IRAN?

Probably not. But Islamic militants may cripple Mubarak's reforms

Other offices in the dilapidated building in downtown Cairo are dark this evening, but Montassir al Zayat's law offices are abuzz. The firm is closely linked with the Gamaa al Islamiya, the militant Islamic group, and its employees are busy preparing the defense of accused Muslim extremists now that the government has ordered their cases rushed through military courts. In a brightly lit room with peeling wallpaper and worn carpeting, al Zayat, a pleasant, heavyset man with a scraggly black beard, defends the militants' use of force. "The government won't let them spread their message peacefully," he says. "So they have to defend themselves with violence."

The aim of the activists al Zayat represents is to topple the government of President Hosni Mubarak in favor of an idealized Islamic order. They want to impose Islamic law in place of Egypt's largely European system. Beyond that, they are rather vague when pressed for details of the world they envision. But a preview was available in al Zayat's anteroom. There in a row sat three women, probably relatives of al Zayat's clients. Despite the summer heat, they were covered from head to foot in heavy blue-black cloth with just slits for eyeholes.

Al Zayat's most prominent client is Sheikh Omar Abdel Rahman, the New Jersey-based cleric suspected of links to New York City terrorists. But Egypt is the real target. The Gamaa al Islamiya is believed responsible for much of the wave of bombings and assassinations that have occurred in Egypt over the past year. The militants have gone for Egypt's economic jugular by attacking tourists. They have also warned off top foreign multinationals, who were just beginning to warm up to Egypt.

SHOOT-OUTS. The government has responded ferociously. On one night in March, 13 people were killed in police raids in Cairo, and an additional seven died in Aswan when security forces stormed a mosque. In all, dozens of suspected militants and policemen have been killed, and 22 militants are under death sentences. One has been executed.

All this threatens the U. S. strategy for maintaining stability in one of the world's most volatile regions. Because the U. S. sees the country's fate as crucial, it is lavishing $2.15 billion in annual aid on Egypt, making the nation the second-largest recipient, after Israel. The U. S. drubbing of Saddam Hussein has given America unprecedented influence in the region. To take advantage of that, U. S. and Egyptian officials are now working hard to broker peace between Israel and the Arabs. "We are on the verge of leaving one era for another," says Egyptian Foreign Minister Amr Moussa.

But just as Arab nationalists challenged the West in the 1950s and 1960s, Islamic militants are fighting a rearguard action aga the pax Americana. An Islamic regin already in place in Sudan, and the A rian regime's future is very muc doubt. But these places are small p toes compared with Egypt, by far largest Arab country in population the bellwether for the region. Mubar spokesman, Mohammed Abdel Mo says: "If Egypt turns red or blue, others will also."

Also at stake is Mubarak's ambit effort to make over the creaking, trally planned Egyptian economy. reforms, which are being monitore both the International Monetary F and the World Bank, have alre brightened Egypt's financial posi But they may also be playing into fundamentalists' hands by exacerba the social inequality that drives E tian youths to turn to Islamic milit Mubarak is now in a terrible bind needs to improve economic perform quickly or the militants will gain recruits. Yet shock therapy—hurtin many people at once—could be suic

BEHIND BARS: ACCUSED EXTREMISTS HAVE THEIR CASES RUSHED THROUGH MILITARY COURTS

MUBARAK: ACTIVISTS AIM TO TOPPLE HIM—BUT HE STILL HAS THE ARMY'S SUPPORT

EGYPT'S MILITANT GROUPS

MUSLIM BROTHERHOOD

(Founded in 1928. Suppressed by Gamal Abdel Nasser, revived under Anwar Sadat in 1970s)

- Quasilegal, has office in Cairo and spokesman, Maamoun al Hodeibi
- Used terror in past, now renounces it
- Members prominent in Egyptian professional associations
- Sympathizers include Egyptian businessmen who recognize need for foreign investment

AL JIHAD

(Founded in 1970s)

- Advocates violent overthrow of Egyptian regime
- Recruited Sheikh Omar Abdel Rahman as spiritual guide
- Assassinated Sadat in 1981
- Some leaders now abroad

GAMAA AL ISLAMIYA

(Founded in 1980s)

- Main militant movement responsible for most of recent violence
- Organized in cells; lacks single outstanding leader
- May include elements of Jihad
- Some groups revere Omar Abdel Rahman

DATA: BUSINESS WEEK

'he militants appear to have taken ir battle for Egypt to American soil ounish the U. S. for supporting Muak. Abdel Rahman has a long history antagonism to the Egyptian governnt. He served as spiritual guide to the ihad group that assassinated Anwar at in 1981. And he is revered by ny of today's Egyptian militants. His ierground pamphlets and cassettes ulate in Cairo. "No! to you Mubarak your regime, your gallows, your , and your iron" reads one of these 'ts. "Your tyrannical state won't last ther hour, while the state of Islam last forever."

'gyptian officials charge that Iran Sudan bear a large responsibility for Egyptian militants. But the Egyp- Islamic movement seems largely ıegrown. After all, Egypt is the cra- of Islamic militancy. There are sever- iifferent schools of militants today in 'pt, all of which have their ideological ts in the Muslim Brotherhood.

Vhile membership in the brotherhood fficially banned, the group is tolerated—a status of which it takes full advantage. It scored well in parliamentary elections in 1987, through an alliance with a legal opposition party. But the group's biggest success has been in winning control of the governing boards of professional associations, including those of lawyers, doctors, engineers, and pharmacists. These elections are far more democratic than political elections, which are heavily rigged, and they reflect the growing Islamization of Egyptian society.

SECRET CELLS. The brotherhood, which now renounces violence, would not be impossible for the West to live with. Although it is very anti-Israel, its sympathizers include businessmen and other professionals who understand the need for foreign links to ensure economic progress. "We must have foreign investments to develop our country and our people," declares Mukhtar Nouh, a prominent lawyer and brotherhood sympathizer.

By contrast, the Gamaa al Islamiya consists of a network of secret cells headed by charismatic local leaders. The Gamaa's decentralized structure makes it extremely hard to defend against or wipe out. Many of its cadres have acquired guerrilla experience fighting the Soviets in Afghanistan. Some of the leaders live abroad, directing their followers by phone and fax.

On a recent afternoon, two bearded, white-robed Gamaa sheikhs consented to meet with journalists in a snug room at the top of a dark, winding stairway in a back street of the squalid Cairo neighborhood of Imbaba. The clerics said they had nothing against tourists as long as they covered up their bodies. The Gamaa only strikes at tourists, they explained, to force the government to release detained group members. They denied getting foreign support—gesturing with laughter at their humble surroundings. Surprisingly, they were also rather doubtful about whether a revolution would occur anytime soon in Egypt. Egypt's women are too loose and its men too selfish, was their analysis.

Most Egyptian and Western analysts

agree that the Egyptian government is a long way from being overthrown. But they worry about the toll being taken on the regime and the country. "The state is not in any danger of collapsing," says Saad Eddin Ibrahim, a professor at the American University in Cairo, who has written extensively on Islamic groups. "But the price is getting high in terms of casualties, psychological pain, and material drains."

The insurgency has led many Egyptians to conclude that Mubarak has not delivered much in the way of either political or economic progress in 12 years in power. The political liberalization that began under Sadat has stalled, leaving frustrated youths with no hope of a say in the system. "Terrorism is a mirror which exposed the system," says Tahseen Bashir, a former presidential spokesman and senior diplomat. "The terrorists are only a small part of a marginalized generation. Islam is all that they have."

The militants' propaganda and community organizing are probably more effective than the violence, which has alienated many Egyptians. Emulating leftist groups in earlier decades, the activists constantly harp on official corruption and the gulf between rich and poor. Indeed, the contrast between the Cairo nouveaux riches, who drive Mercedes and hang out in international hotels, and average citizens, who live in cramped, grimy flats often without running water, is becoming ever more glaring.

FILLING A VOID. The militants have cleverly chosen to escalate their campaign at the moment when the IMF-mandated austerity measures are biting hardest. With subsidies slashed and price controls lifted, prices of food, fuel, and clothing have all soared. Services such as education and health are deteriorating. And the government—formerly required to employ any college graduate—has closed its doors.

Into this void step the Islamists, offering loans, health care, and transportation. "A typical secondary school graduate finds himself under extreme duress," says professor Ibrahim. "He can't find a job; he can't find a house; he can't afford to get married. He becomes easy prey for the extremists."

While assassination is always a possibility, only the military has the power to bring down Mubarak. But it would do so only if it found that its own interests were being severely threatened. Right now, there are only hints of military discontent. Senior officers are said to be unhappy with the decline in their status in comparison to wealthy civilian businessmen. A retired general reported hearing complaints from some junior officers who had to present lavish gifts to their superiors. But none of this is enough for the military to risk trying to make a change at the top.

Still, the unsettled situation is making it tough for Mubarak's technocrats to push ahead on economic reforms. One of the key architects is Youssef Boutros Ghali, an alumnus of both Massachusetts Institute of Technology and the IMF. Recently promoted to cabinet level, Boutros Ghali admits that the militants have become a "trying problem " for him. "It's harder to keep focused," he says. "You always have to consider the impact on terrorism."

There are signs that his reform plan may be stalling—after making a good start. Egypt got huge benefits from freeing up foreign exchange regulations and from selling treasury bills. Almost $14 billion flooded into the central bank coffers—a shocking amount in a country usually short of cash.

Adventurous investors began sniffing around Cairo for bargains. Kidder Peabody & Co. has an office in Cairo an acting as an adviser on privatizing S Cement Co.—the hottest stock on thinly traded exchange. It's also con ering launching a $50 million investm fund later this year. On the manufac ing side, General Motors Corp., wh already makes light trucks in Egypt gearing up to start producing Opel dans there this fall. Ronald G. Na chairman of GM Egypt, sees the nat as a long-term "growth market" wo getting established in now. Peug Hyundai, Suzuki, and Chrysler Jeep all gearing up car ventures.

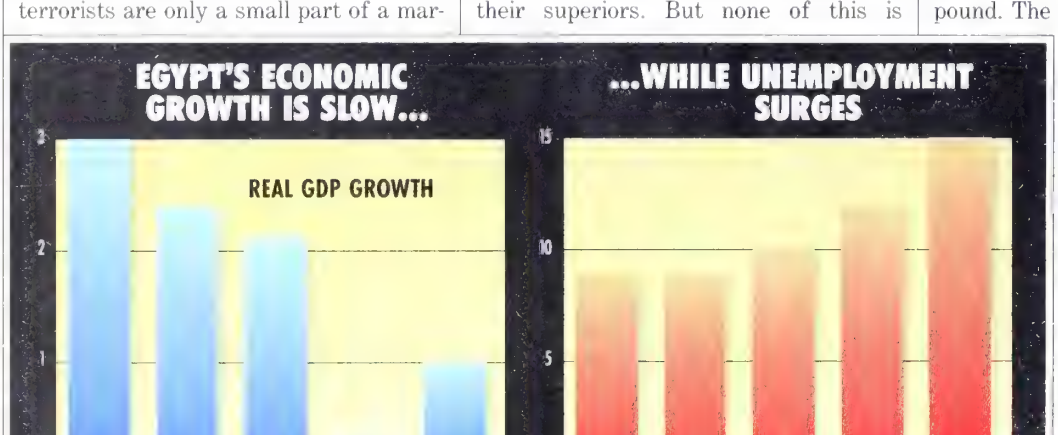
GROWING PRESSURE. These business ecutives seem more worried about nig marish government regulation than lamic militancy. But there are so signs of nervousness. Sources in Ca say that the Central Bank recently sp $300 million bolstering the Egypt pound. The government is also resist pressure from the Wo Bank to get moving on vatization and cut 100% iffs. Stalling on these forms could jeopard some $7 billion in debt lief that Egypt is to rece from international lende

The trouble is, the g ernment is worried t eliminating trade protect combined with privatizat could raise the already acceptably high unempl ment rate (chart). Privat tion is a sensitive polit issue. The drive is alre meeting some opposit from local businessm who are employing nati alist rhetoric to try to bl Coca-Cola Co. and PepsiCo Inc. fr purchasing their local bottlers.

Mubarak, who is a cautious man, likely remain committed to the progra but he is not going to make any r moves. "He has to be convinced," s another key player in economic pol Cabinet Affairs Minister Atef Eb "Adventure in a developing country very dangerous."

The next couple of years promise be crucial for Egypt. It is a coun famed for stability and for shrugg off adversity. It would be a mistake underrate the staying power of an Eg tian government—no matter how in The likelihood is that Mubarak will st around to steer the country towar more market-oriented economy. But i also painfully clear that the regime more vulnerable than at any time si Sadat's death.

By Stanley Reed and Sarah Gauch Cairo



EDITED BY ELIZABETH WEINER

A WELCOME MAT FOR U.S. BUSINESS ROM MANDELA AND DE KLERK

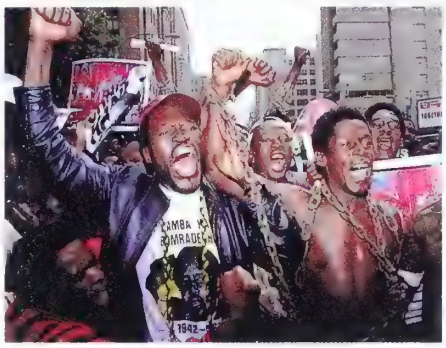
Siegfried Mogane, a young black bank manager from Soweto, knows firsthand the benefits his country stands to reap from renewed economic ties with the U. S. As intern at Pryor, McClendon, Counts & Co., a New York in-stment bank, Mogane, 38, has been learning the ropes of blic finance. That kind of expertise will be in demand once uth Africa becomes a nonracial democracy and starts to ad-ess the urgent needs of its black townships. After sanctions e lifted, Mogane says, returning American companies "will rease job opportunities, train our peo- in necessary skills, and make the rkets much more competitive."

That hopeful vision is shared by ican National Congress President Nel- Mandela and South African Presi-nt F.W. de Klerk, who will make a e joint appearance in Philadelphia on y 4 to receive the Liberty Medal. eir visit marks a turning point in S.-South Africa relations. After urging nerence to sanctions, Mandela is join- de Klerk to woo U. S. companies l capital back to South Africa.

Mandela probably won't call publicly the repeal of sanctions during his o-week U. S. visit. That will come after a date for South rica's first nonracial election is formally set and a transi-nal executive council is installed. But negotiators believe h goals are close. So Mandela will use his U. S. visit to do ne advance pump-priming. And he'll urge President Clinton rally the Group of Seven behind a Marshall Plan-size pro-m to bolster the country's historic remaking.

GER HELPER. Mandela has little choice. "We do not want to erit a wasteland," he says. While he faces distractions m right-wing white groups and his main black political rival, ief Mangosuthu Buthelezi, the ANC president and his col-gues must stay focused on the recession-racked South ican economy. Expectations among the poor and powerless are soaring, and Mandela needs to lay the foundation for growth to dampen the endemic violence that threatens to undermine South Africa's transition. For the ANC to hold the allegiance of young black militants, says Pauline Baker, associate director of the Aspen Institute, a Washington think tank, "there has to be a visible sign that wealth is being distributed in a way that improves life in the townships."

The Clinton Administration is eager to help as soon as the ANC officially drops support for sanctions. As a first step, Clinton is likely to issue an executive order lifting the Gramm Amendment, under which the U. S. has blocked International Monetary Fund loans to South Africa. Access to IMF facilities would, in turn, open up the World Bank's spigot. The bank is readying about $1 billion in infrastructure loans to build schools and hospitals—creating thousands of construction jobs in the process.



JOHANNESBURG DEMONSTRATION: A HOT ECONOMY COULD COOL POLITICAL TEMPERS

HUNGRY MARKET. Even so, no one expects investment to rush back into South Africa. The Bush Administration two years ago ended a federal ban on U. S. investment there. Now, it could take time to repeal the restrictions imposed by more than 150 states and cities.

Ultimately, however, the hungry South African market will be a powerful lure for U. S. multinationals. Digital Equipment Corp. just opened a South Africa sales unit on July 1. And there are a few tentative signs that the economy is perking up. Consumer spending edged up in the first quarter. And the price of gold has climbed nearly 25% since the start of the year, bringing a touch of relief to an industry that still generates 35% of foreign exchange earnings. To sustain the fragile recovery, South Africa needs a swift political settlement. Until then, economic reconstruction can't truly begin.

By Amy Borrus in Washington and Alan Fine in Johannesburg

LOBAL WRAPUP

LLING ATTALI'S GUCCIS

Jacques Attali's resignation as President of the European Bank for Re-onstruction & Development is opening p a free-for-all for the job. French olitics argue that since Paris gave p the headquarters to London, the ost should go to a French notable, ossibly Treasury chief Jean-Claude richet. Other board members are acking Citicorp Vice-Chairman H. nno Ruding. European Community conomics Commissioner Henning hristophersen is also applying. One sk: After Attali's flamboyant style, ie board could opt for a risk-averse iccessor who would barely improve the EBRD's loan record in eastern Europe and the former Soviet Union.

ASIAN AWAKENING

Largely ignored by George Bush, Asia will be getting more attention from President Clinton, who wants the U. S. in on the action in the booming region. In a speech at Waseda University July 6, the eve of the Tokyo summit, Clinton will propose a strengthened economic alliance with Asia and suggest that this year's meeting of the 12-nation Asian Pacific Economic Cooperation group, set to convene in Seattle in November, be upgraded to a heads-of-government summit. As APEC president for 1993, Clinton would host.

RAO ON THE ROPES

India's latest corruption scandal won't go away. When Bombay financier Harshad Mehta first alleged in June that he had paid a $320,000 bribe to Prime Minister Narasimha Rao in 1991, the ruling Congress Party attempted to bury the incident. But Mehta, implicated in the Bombay stock-market scandal involving Citicorp and other foreign banks, has kept up his attack. If Rao is forced out, India's reforms could stall. Meanwhile, keen to prove his program is intact, Rao is speeding the tedious approval process for foreign investment. Coca-Cola, Peugeot, and GE Capital all just got green lights.

A TOPSY-TURVY YEAR FOR GIANTS

JAPAN AND THE U.S. GAINED IN THE GLOBAL 1000, BUT EUROPE LANGUISHED

Recession, joblessness, political turmoil. All these hit the world's biggest companies in the past 12 months, showing just how swiftly the fortunes of an industry or a region can change. In this topsy-turvy year, Japanese companies, only a year ago the victims of recessionary gloom, roared back, thanks to a stronger yen, timely government intervention, and the first signs that the recession had bottomed out. Many U. S. companies revived, despite anxiety over the strength of the recovery. But European corporations, which were strong in 1992, slid under the pressures of deepening recession, political disarray, and weaker currencies.

These are the broad themes captured by BUSINESS WEEK's sixth annual Global 1000 listing. Using one of the most telling indicators—which mirrors investors' fears and hopes—the Global 1000 ranks the world's biggest companies by their market capitalization.

Compiled by Morgan Stanley Capital International, the Global 1000 tracks 2,500 companies in 22 countries in developed markets. The companies are then ranked on a worldwide basis, using market value and other data recorded on May 31. All valuations are translated from local currencies into U. S. dollars. For the first time, Morgan Stanley has also compiled values for the 100 most important companies in emerging m kets. In such far-flung developing eco mies as Argentina and Korea, many c porations posted huge gains in val Their performance shows that, desp the pitfalls, much of the action in vestment has shifted to Latin Amer and Asia (page 56).

Taken together, the data yield insig into the key global industries, especia those dominated by the behemoths t make up the top 100 companies. Ta telecommunications, an industry t rose 36% in total market value. Thar to corporate restructurings and promise of new markets, Nippon Te graph & Telephone Corp. and Ameri Telephone & Telegraph Co. landed fi and second place respectively on list, up from second and ninth pla last year.

Yet for other giants, it was a dov beat year. Investors showed their c cern over the coming crackdown on d prices as health-care reform looms the U. S. and Europe. That forced do the valuation of pharmaceuticals, one last year's stellar groups. Merck & lost 25% in market value and fell fr eighth place to No. 18 this year. Brita Glaxo Holdings PLC declined 32%, s ping from the 12th spot to 31st. H technology also showed some sharp versals of fortune. IBM's inability to ov come weakness in the mainframe co puter business forced its market va down a stunning 41%, to $30.1 billi pushing it from 10th place to 27th.

BEST PERFORMANCE. For Japan, swings were mostly on the upside. Si August of 1992, government efforts shore up share prices have boosted Nikkei stock index by 40%. Improv economic prospects bolstered the ra further. And the yen, which has risen most 20% against the dollar in the p 12 months, amplifies the effect. Sh prices for Toyota Motor Corp., for exa ple, rose 30% in dollars, but only 9% yen. All told, Japan added 36 com nies to the Global 1000 list, and its to market value on the list rose 51%.

'he biggest Japanese comeback was NTT, which took back its reigning as the company with the biggest ket valuation: an eye-popping $141 on. The rebound came, in part, on es that the government would let raise rates on local calls for the time since 1976. But investors were impressed by the company's plans rim its bloated payrolls by more 10,000 a year, to 200,000 by the of 1996. Says Eric Gan, an analyst Kleinwort Benson International Inc.: is is the best restructuring story in market."

Iore cost-cutting will be needed, how- , if Japanese exporters are to coun- ct the effect of the ner yen. Carmaker san Motor Co., 82 on the list, fig- s the stronger yen ld prevent it from ing prices higher in U. S. Nissan esti- es the yen, if it set- in at recent highs 05 to the dollar, will se nearly $1 billion n its 1994 operating its.

Iarket values will al- t certainly rise fur- for Japan's nimbler ufacturers. Yet Jap- se banks are about igh as they can get, n such giants as Mit- ishi Bank Ltd., 6, and Sumitomo k Ltd., No. 7, mus- g their way back the top. After Jap- se regulators ped up the markets n public money and ed set up a clear- house for bad real ate debt, Japan's ks, brokers, and perty and casualty rers added 69% to ir collective value.

Finance Ministry has also allowed banks, which still carry shaky real ate portfolios, to report their bad t by degrees. Doling out the truth in doses could prove unworkable, how- r, if the real estate crisis worsens.

ike Japan, the U. S. recorded some ng gains. Oracle Systems Corp. in lwood City, Calif., tripled its total ket value, thanks to sharply rising and for its data-base management ware. Other technology companies e winners, including Compaq Com- er with its new low-cost personal puter, and Motorola, which makes microchip for Apple Computer Inc.'s erBook. High tech did not reign supreme, however. Chrysler Corp. astounded investors by rolling out its successful LH line of sedans. One of 1993's top gainers, the carmaker jumped up 191% in market value, to $15.4 billion.

Such rebounds don't seem likely in the near term for the troubled sectors of health care, consumer products, and retailing. In addition to Merck, drug companies such as American Home Products and Eli Lilly suffered from the fallout in drug stocks. Lilly, whose chief executive was just forced out, also made costly and so far unprofitable investments in biotech.

Pressure on prices will also hurt tobacco and food companies. Philip Morris Cos., determined to tough it out in cigarette price wars, will have a hard time restoring a 37% drop in market value. Even mighty retailer Wal-Mart Stores Inc. must deal with a slowdown in consumer spending: Its value rose only 5%.

CONSUMER WOES. In Europe, the same fears of falling prices and narrower margins are hurting drugmakers, brand marketers, and retailers. Britain's Wellcome, producer of the AIDS drug AZT, lost 32% in market value as many governments pressured it to cut prices. Some researchers are also expressing doubt about the use of AZT in some treatment programs. France's LVMH Moët Hennessy Louis Vuitton, purveyor of Christian Dior clothing, Louis Vuitton handbags, and Hennessy cognac, lost 10% of its market value as recession dulled the world's appetite for luxury goods. The consumer stock woes were not all in upscale goods. British food retailers such as J. Sainsbury PLC and Argyll Group PLC are under pressure from newly opened discount stores.

Britain had an especially tumultuous year. On Sept. 16, 1992, British companies on the Global 1000 lost 16% of their market capitalization in dollars virtually overnight, when the pound was forced out of the European exchange-rate mechanism and sterling was devalued. In local currency, however, companies such as British Telecommunications PLC and global carrier British Airways PLC held up well.

On the Continent, though, many sectors are in a long-term slump. Take autos. Mercedes-Benz parent Daimler Benz, in the midst of costly restructuring like many German companies, lost 30% in market value. Likewise, France's Peugeot declined 33%, to $4.94 billion.

No such clouds darken booming Southeast Asia. Singapore, a powerhouse exporter to the region, posted a total market-value gain of 13%. In Hong Kong, the center of the China trade, real estate prices have soared. Thus, property giant Sun Hung Kai boosted market value by 25%. Other hot "China plays" in Hong Kong are Wharf (Holdings) and Hutchison Whampoa, both developers of mainland real estate in such cities as Shanghai.

But Asia's boom is the exception in a year when a global rebound seemed remote indeed. This year, Japan managed to maneuver its way back, and other hardy giants hung on. More and more, companies will need to take advantage of the steady spread of deregulation worldwide, the falling away of trade barriers, and the emergence of dynamic economies in new regions. Those that succeed in doing so are certain to keep turning up at the top of the deck.

By Larry Holyoke in Tokyo, with Paula Dwyer in London, Stewart Toy in Paris, Christopher Power in New York, and bureau reports

HOW THE TOP PERFORMERS RANK

SALES

	Billions of U.S. dollars
1. ITOCHU	$180.0
2. SUMITOMO CORP.	168.3
3. MITSUBISHI CORP.	166.1
4. MARUBENI	161.8
5. MITSUI & CO.	160.2
6. EXXON	117.0
7. GENERAL MOTORS	113.0
8. NISSHO IWAI	105.6
9. FORD MOTOR	100.0
10. TOYOTA MOTOR	94.9

PROFITS

	Billions of U.S. dollars
1. PHILIP MORRIS	$4.94
2. EXXON	4.80
3. ROYAL DUTCH/SHELL GRP.	4.78
4. GENERAL ELECTRIC	4.31
5. AT&T	3.85
6. DUPONT	2.69
7. MERCK	2.45
8. UNILEVER	2.23
9. TOYOTA MOTOR	2.22
10. CHEVRON	2.21

SHARE-PRICE GAIN

	Percentage change from 1992 in U.S. dollars
1. LIBERTY MEDIA	396.0%
2. SYNOPTICS COMMUN.	336.0
3. PROMUS	225.4
4. QVC NETWORK	224.0
5. ORACLE SYSTEMS	180.7
6. INTL. GAME TECHNOL.	171.0
7. CHRYSLER	144.8
8. CISCO SYSTEMS	136.0
9. INTEL	121.8
10. COMPAQ COMPUTER	116.4

RETURN ON EQUITY

	Percentage
1. DORDTSCHE PETROL.	224.9%
2. SMITHKLINE BEECHAM	71.2
3. AMGEN	63.3
4. U.S. HEALTHCARE	61.3
5. UST	60.0
6. AVON PRODUCTS	57.1
7. WARNER-LAMBERT	56.4
8. POLYGRAM	56.4
9. PRUDENTIAL	55.9
10. RENTOKIL GROUP	54.0

The Global 1000 — The Leaders

RANK 1993	RANK 1992	Billions of U.S. dollars		MARKET VALUE
1	2	NIPPON TELEGRAPH & TELEPHONE	Japan	140.52
2	9	AMERICAN TELEPHONE & TELEGRAPH	U.S.	82.40
3	1	ROYAL DUTCH/SHELL GROUP	Neth./Britain	81.59
4	3	EXXON	U.S.	81.35
5	5	GENERAL ELECTRIC	U.S.	79.34
6	14	MITSUBISHI BANK	Japan	73.56
7	16	SUMITOMO BANK	Japan	65.97
8	6	WAL-MART STORES	U.S.	64.07
9	20	INDUSTRIAL BANK OF JAPAN	Japan	63.21
10	23	SANWA BANK	Japan	61.19
11	21	FUJI BANK	Japan	60.81
12	19	DAI-ICHI KANGYO BANK	Japan	57.67
13	11	TOYOTA MOTOR	Japan	56.97
14	7	COCA-COLA	U.S.	54.23
15	26	SAKURA BANK	Japan	49.49
16	25	TOKYO ELECTRIC POWER	Japan	46.26
17	4	PHILIP MORRIS	U.S.	44.97
18	8	MERCK	U.S.	43.78
19	13	BRITISH TELECOMMUNICATIONS	Britain	40.70
20	43	NOMURA SECURITIES	Japan	39.56
21	17	DUPONT	U.S.	35.41
22	18	PROCTER & GAMBLE	U.S.	33.38
23	29	GTE	U.S.	32.98
24	50	ROCHE HOLDING	Switzerland	31.46
25	15	BRISTOL-MYERS SQUIBB	U.S.	31.08
26	24	UNILEVER	Neth./Britain	30.35
27	10	INTERNATIONAL BUSINESS MACHINES	U.S.	30.14
28	35	NESTLE	Switzerland	29.30
29	22	JOHNSON & JOHNSON	U.S.	29.25
30	27	PEPSICO	U.S.	28.96
31	12	GLAXO HOLDINGS	Britain	28.79
32	34	CHEVRON	U.S.	28.66
33	31	GENERAL MOTORS	U.S.	28.37
34	33	MOBIL	U.S.	27.82
35	37	AMOCO	U.S.	27.79
36	64	AMERICAN INTERNATIONAL GROUP	U.S.	27.20
37	NR	ASAHI BANK	Japan	26.86
38	68	BANK OF TOKYO	Japan	26.48
39	60	KANSAI ELECTRIC POWER	Japan	26.32
40	30	ALLIANZ HOLDING	Germany	26.29
41	32	BRITISH PETROLEUM	Britain	25.98
42	47	MICROSOFT	U.S.	25.95
43	51	HITACHI LTD.	Japan	25.84
44	77	NIPPON STEEL	Japan	25.73
45	40	BELLSOUTH	U.S.	25.62
46	45	FORD MOTOR	U.S.	25.45
47	42	MATSUSHITA ELECTRIC INDUSTRIAL	Japan	25.03
48	49	MINNESOTA MINING & MFG.	U.S.	24.72
49	94	TOKAI BANK	Japan	24.24
50	150	HSBC HOLDINGS	Britain	23.78

RANK 1993	RANK 1992	Billions of U.S. dollars		MAR VAL
51	61	BELL ATLANTIC	U.S.	23
52	148	INTEL	U.S.	23
53	28	ABBOTT LABORATORIES	U.S.	23
54	36	PFIZER	U.S.	23
55	55	WALT DISNEY	U.S.	23
56	63	SOUTHWESTERN BELL	U.S.	23
57	81	MITSUBISHI HEAVY INDUSTRIES	Japan	22
58	93	LONG-TERM CREDIT BANK OF JAPAN	Japan	22
59	79	TOSHIBA	Japan	21
60	141	MOTOROLA	U.S.	21
61	41	SIEMENS	Germany	21
62	58	HEWLETT-PACKARD	U.S.	20
63	38	AMERICAN HOME PRODUCTS	U.S.	20
64	86	FANNIE MAE	U.S.	20
65	78	SEVEN-ELEVEN JAPAN	Japan	20
66	89	HOME DEPOT	U.S.	20
67	44	B.A.T. INDUSTRIES	Britain	19
68	62	ATLANTIC RICHFIELD	U.S.	19
69	54	DEUTSCHE BANK	Germany	19
70	92	CHUBU ELECTRIC POWER	Japan	19
71	53	BRITISH GAS	Britain	19
72	73	AMERITECH	U.S.	19
73	76	PACIFIC TELESIS	U.S.	19
74	107	TOKIO MARINE & FIRE	Japan	19
75	48	SMITHKLINE BEECHAM	Britain	19
76	88	SEARS, ROEBUCK	U.S.	18
77	69	BTR	Britain	18
78	65	ASSICURAZIONI GENERALI	Italy	18
79	59	ELF AQUITAINE	France	18
80	72	McDONALD'S	U.S.	17
81	96	US WEST	U.S.	17
82	106	NISSAN MOTOR	Japan	17
83	146	BERKSHIRE HATHAWAY	U.S.	17
84	83	NYNEX	U.S.	17
85	52	HANSON TRUST	Britain	17
86	66	WMX TECHNOLOGIES	U.S.	16
87	103	EASTMAN KODAK	U.S.	16
88	178	DAIWA SECURITIES	Japan	16
89	108	UNION BANK OF SWITZERLAND	Switzerland	16
90	74	TEXACO	U.S.	16
91	100	HONG KONG TELECOMMUNICATIONS	Hong Kong	16
92	39	DAIMLER-BENZ	Germany	16
93	95	SANDOZ	Switzerland	16
94	91	ALCATEL ALSTHOM	France	16
95	97	ITO-YOKADO	Japan	16
96	80	SCHLUMBERGER	U.S.	15
97	105	MITSUBISHI CORP.	Japan	15
98	139	DAIWA BANK	Japan	15
99	104	SONY	Japan	15
100	70	BROKEN HILL PROPRIETARY	Australia	15

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MANY THIRD WORLD PLAYERS ARE GOING WORLD-CLASS

BUSINESS WEEK's first Scoreboard of the world's 100 most valuable emerging-market companies

Weeks of hoopla heralding the privatization of Argentina's state oil company, YPF, paid off big on June 28. Demand for shares was so strong that Economy Minister Domingo Cavallo announced he would sell 45% of YPF's stock to hungry investors from around the world, instead of the 33% originally planned. The price: $19 per share. The deal will fetch the Argentine government $3 billion in cash, and also posts YPF as a public company with a market value of $6.7 billion. And it will catapult YPF into the top ranks of the 100 most valuable companies in emerging financial markets.

Privatizations like YPF's are part of the drive behind a new global phenomenon: the fast-rising flow of foreign investments into developing countries. Investors in industrial countries are always searching for better yields than they can find at home. And they're finding them everywhere from Buenos Aires to Taipei. Already, foreign holdings of corporate stocks in emerging markets have climbed to an estimated $50 billion. U. S. investors alone poured $5.1 billion into equities in 13 countries in Latin America and Southeast Asia last year, up from just $300 million in 1988.

The growing importance of these newly opened financial markets and their corporate flagships, led by high-flying Teléfonos de México, is reflected in BUSINESS WEEK's first Scoreboard of the 100 most valuable emerging-market companies. As an addition to the annual BUSINESS WEEK Global 1000, the data, supplied by Morgan Stanley Capital International, ranks companies by market value, as of May 31.

"The attraction [of emerging markets] is that the returns are high," says Mark Mobius, president of Hong Kong-based Templeton Emerging Markets Fund, which has seen a 20% annualized return for five years. Mobius is a globe-trotter, hunting down companies with good prospects. Many in his fund are banks, since financial institutions in emerging markets are generally allowed to enter a broad range of businesses.

A broad market spectrum is the target of other funds, such as the IFC Investable Emerging Markets Index Fund, launched in June by the International Finance Corp., the World Bank's private-sector financing arm. State Street Global Advisers, the investment management arm of Boston's State Street Bank & Trust Co., will operate the fund, based on an index of 650 stocks in 18 countries.

Fund managers are seeking not only higher returns but also diversification. While individual emerging markets may be volatile, as a group they are not. That's because their business cycles aren't tied to each other's, nor do they move in unison with the industrial world's. "They are not in sync—they are a good buffer," says Farida Khambata, director of capital markets at the IFC. Moreover, despite their locations in what used to be called the Third World, a growing number of emerging-market companies have become "world-class companies, with lean and mean balance sheets," says Khambata.

The best buys are not necessarily in booming countries. Despite Brazil's stagnant economy, for example, an influx of bargain-hunters has pushed up its e ty market by 49% in dollar terms year. In South Korea, non-Korean sh holdings in any company are limite 15%. As a result, foreigners are buy shares in some from other foreigners premiums up to 50% over the mar for much-coveted companies, such Korea Mobile Telecom Corp. Korea p to raise the limit for foreigners soor

"HARD LANDING." To play in the big emerging market, China, many in tors are buying shares of compar based in neighboring countries. S favor Taiwanese food conglomerate P ident Enterprises Corp., which has mainland joint ventures and more in works. Many Hong Kong companies have extensive operations in Chi while nine mainland outfits are sch uled for listing on the colony's H Seng index. "Hong Kong will bec the main center for investors in Chi says James Marshall, senior manage Nomura Research Institute Hong K

He warns, though, that China's ec my is starting to overheat and expec "reasonably hard landing." That sugg why the first rule of investing in em ing markets is a strict one: Diversif

By John Pearson in New York, Joyce Barnathan in Hong Kong, Hinchberger in São Paulo, and Ge Wehrfritz in Taipei

Seoul plans to raise its ceiling for foreign investment in companies such as Samsung

TOP 100 EMERGING-MARKET COMPANIES

Company	Country	Market value (billions of U.S. dollars)
TELEFONOS DE MEXICO (TELMEX)	Mexico	25.66
KOREA ELECTRIC POWER	Korea	13.87
CATHAY LIFE INSURANCE	Taiwan	8.06
TELEBRAS	Brazil	7.36
GRUPO FINANCIERO BANACCI	Mexico	6.93
CIFRA	Mexico	6.10
CHINA STEEL	Taiwan	6.00
GRUPO TELEVISA	Mexico	5.83
FIRST COMMERCIAL BANK	Taiwan	5.65
HUA NAN BANK	Taiwan	5.44
GRUPO FINANCIERO BANCOMER	Mexico	5.31
CHANG HWA BANK	Taiwan	4.91
ELETROBRAS	Brazil	4.84
BANGKOK BANK	Thailand	4.76
GRUPO CARSO	Mexico	4.76
CEMEX	Mexico	4.73
TELEFONICA DE ARGENTINA	Argentina	4.27
TELEFONOS DE CHILE	Chile	3.19
PETROBRAS	Brazil	3.10
POHANG IRON & STEEL	Korea	3.07
TELECOM DE SAO PAULO	Brazil	3.02
TELECOM ARGENTINA	Argentina	2.93
BRADESCO	Brazil	2.92
TOLMEX	Mexico	2.87
NAN YA PLASTIC	Taiwan	2.82
INT'L COMMERCIAL BANK OF CHINA	Taiwan	2.72
SAN MIGUEL	Philippines	2.70
THAI FARMERS BANK	Thailand	2.64
SAMSUNG ELECTRONICS	Korea	2.63
VALE DO RIO DOCE	Brazil	2.59
ENDESA	Chile	2.57
FORMOSA PLASTICS	Taiwan	2.54
GRUPO FINANCIERO SERFIN	Mexico	2.49
SOUZA CRUZ	Brazil	2.43
BANCO ITAU	Brazil	2.27
THAI AIRWAYS INTERNATIONAL	Thailand	2.24
AYALA	Philippines	2.17
COPEC	Chile	2.16
ASIA CEMENT	Taiwan	2.14
SIAM CEMENT	Thailand	2.08
TAIWAN CEMENT	Taiwan	2.05
KIMBERLY-CLARK DE MEXICO	Mexico	2.00
KRUNG THAI BANK	Thailand	2.00
FEMSA	Mexico	2.00
HYUNDAI MOTOR	Korea	1.98
GOLDSTAR	Korea	1.97
PEREZ COMPANC	Argentina	1.94
GRUPO ICA	Mexico	1.93
SIAM COMMERCIAL BANK	Thailand	1.92
HANIL BANK	Korea	1.91
51. PHILIPPINE LONG DISTANCE	Philippines	1.89
52. KOREA FIRST BANK	Korea	1.88
53. TAIPEI BUSINESS BANK	Taiwan	1.86
54. SHINHAN BANK	Korea	1.84
55. DAEWOO CORP.	Korea	1.75
56. CHO-HUNG BANK	Korea	1.73
57. BANGKOK LAND	Thailand	1.73
58. BANK OF SEOUL	Korea	1.72
59. VITRO	Mexico	1.71
60. YUKONG	Korea	1.71
61. FORMOSA CHEMICALS & FIBRE	Taiwan	1.70
62. DAEWOO SECURITIES	Korea	1.69
63. COMMERCIAL BANK OF KOREA	Korea	1.68
64. COMERCIAL MEXICANA	Mexico	1.68
65. EVERGREEN MARINE	Taiwan	1.63
66. TAIWAN MACHINERY MFG.	Taiwan	1.63
67. EL PUERTO DE LIVERPOOL	Mexico	1.62
68. LAND & HOUSE	Thailand	1.59
69. PAPELES Y CARTONES	Chile	1.55
70. LUCKY LTD.	Korea	1.55
71. MANILA ELECTRIC	Philippines	1.51
72. KOC HOLDING	Turkey	1.48
73. LUCKY SECURITIES	Korea	1.46
74. CATHAY CONSTRUCTION	Taiwan	1.46
75. KIA MOTORS	Korea	1.45
76. FAR EASTERN TEXTILE	Taiwan	1.45
77. GRUPO INDUSTRIAL BIMBO	Mexico	1.42
78. BANCO COMERCIAL PORTUGUES	Portugal	1.42
79. CHINA DEVELOPMENT	Taiwan	1.39
80. LIGHT-SERVICOS DE ELETRICIDADE	Brazil	1.38
81. DONGSUH SECURITIES	Korea	1.38
82. ENERSIS	Chile	1.37
83. ASTRA INTERNATIONAL	Indonesia	1.36
84. DAEWOO HEAVY INDUSTRIES	Korea	1.35
85. APASCO	Mexico	1.31
86. ITAUSA	Brazil	1.29
87. DAISHIN SECURITIES	Korea	1.29
88. BANCO PORTUGUES DO ATLANTICO	Portugal	1.28
89. PRESIDENT ENTERPRISES	Taiwan	1.26
90. GRUPO GIGANTE	Mexico	1.24
91. DAEWOO ELECTRONICS	Korea	1.21
92. TATUNG	Taiwan	1.20
93. USIMINAS	Brazil	1.19
94. CERVEJARIA BRAHMA	Brazil	1.16
95. BANCO TOTTA & ACORES	Portugal	1.15
96. SSANG YONG OIL REFINING	Korea	1.14
97. AKBANK	Turkey	1.13
98. HUALON TEIJRAN	Taiwan	1.13
99. HYUNDAI ENGINEERING	Korea	1.11
100. BANK OF AYUDHYA	Thailand	1.07

DATA: MORGAN STANLEY CAPITAL INTERNATIONAL

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THE BUSINESS WEEK GLOBAL 1000

COUNTRY BY COUNTRY

SSARY

KET VALUE:
price on May 31, 1993, multiplied by available number of shares outstanding, ted into U.S. dollars at May month-end nge rates. Market value may include l classes of stock; price and yield data sed on the company's most widely held

E PRICE AND ANNUAL CHANGE:
g per-share price on May 31, 1993, in ollars. Annual percent change from May 92, to May 31, 1993, both in U. S. dollars each company's local currency.

PRICE/BOOK VALUE RATIO:
The ratio of May closing price to latest available net worth per share or common shareholders' equity investment.

PRICE/EARNINGS RATIO:
The ratio of May closing price to latest 12 months' earnings per share.

YIELD:
Latest 12 months' dividends per share as a percent of May closing price.

SALES:
Net sales reported by company, translated at May 31 exchange rates; revenues for banks and other financial institutions are not included because they are not comparable to those of industrial companies.

PROFITS:
Latest aftertax earnings available to common shareholders, translated at May 31 currency exchange rates; profits are from companies' continuing operations before extraordinary items. Sales, profits, and assets are for 1992 fiscal year unless noted.

RETURN ON EQUITY:
Latest 12-months' earnings per share as percent of most recent book value per share.

INDUSTRY CODE:
For key to the two-digit code, see page 107.

Data for individual companies: Morgan Stanley Capital International, unless otherwise indicated. Country composites and rankings calculated by BUSINESS WEEK. Additional data by Standard & Poor's Compustat Services, a division of McGraw-Hill, Inc. if footnoted.

	GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL.	PRICE PER SHARE U.S. $	% CHANGE FROM 1992 (U.S. $)	(LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL	PROFITS U.S. $ MIL.	ASSETS U.S. $ MIL	RETURN ON EQUITY %	INDUSTRY CODE
AL OSITE		**7856312**	**115**	**9**	**13**	**2.7**	**35**	**2.8**	**8385536**	**304766**	**26800839**	**11.7**	
TRALIA													
RY COMPOSITE		**75607**	**4**	**-10**	**1**	**1.7**	**17**	**3.5**	**52511**	**2239**	**281742**	**7.9**	
oken Hill Proprietary	100	15614	10	-12	-2	3.0	25	2.9	9791	560	15981	12.0	11
ews Corp.	232	9007	5	22	36	1.1	15	0.4	6906	360	17777	6.9	51
ational Australia Bank	243	8615	7	10	23	1.6	14	4.8	NA	544	69659	11.1	61
'R Nylex	408	5488	2	0	12	1.8	21	3.4	3886	248	5748	8.2	37
RA	430	5187	9	-22	-12	1.7	19	3.5	3549	279	5630	9.0	24
mmonwealth Bank of Australia	477	4809	6	-3	9	1.3	17	4.8	NA	277	59	7.5	61
estpac Banking	521	4474	3	-4	7	1.0	17	3.2	NA	-730	75230	5.6	61
les Myer	525	4456	3	-18	-8	2.1	14	3.7	10287	311	3882	15.1	54
estern Mining	623	3692	4	-5	6	1.8	41	1.4	973	119	2710	4.4	24
cific Dunlop Olympic	732	3116	3	-20	-11	2.1	19	4.3	3935	146	4028	11.1	71
ncor	764	2999	6	-4	8	1.9	17	3.7	2970	151	2949	11.1	23
NZ Banking Group	781	2946	2	-23	-13	0.9	-8	5.4	NA	401	68541	-11.9	61
iR	862	2661	3	-10	0	1.4	19	4.9	3185b	143b	4018	7.6	71
sters Brewing Group	893	2544	1	-45	-39	1.6	12	2.3	7029	232	5528	12.7	43
TRIA													
RY COMPOSITE		**6965**	**199**	**-2**	**-3**	**3.2**	**41**	**0.8**	**2105**	**187**	**58075**	**8.8**	
Länderbank Bank Austria	497	4666	88	-3	-4	2.2	48	1.0	NA	113	49770	4.5	61
-Generali	970	2299	310	0	-1	4.3	33	0.6	2105a	75a	8305a	13.1	63
GIUM													
RY COMPOSITE		**36826**	**191**	**9**	**8**	**1.3**	**16**	**5.1**	**38245**	**2511**	**237236**	**9.5**	
ectrabel	211	9480	176	27	26	1.6	13	7.0	5801a	684a	12810a	12.2	12
trofina	374	5927	255	-22	-22	1.6	44	3.4	16967	134	10817	3.6	11
ciété Générale de Belgique	581	3954	67	-1	-2	0.9	21	5.1	NA	189	10191a	4.2	71
actebel	591	3893	278	12	11	1.4	14	4.8	7709	282	15998a	10.0	71
énérale de Banque	700	3263	226	19	17	1.2	10	5.8	NA	328	102152	11.9	61
edietbank	801	2855	197	31	29	1.2	9	5.1	NA	224	70401	13.0	61
ivay	802	2852	344	-13	-14	0.9	11	5.9	7769	257	8463a	8.2	22
G Group (4)	NR	2345	78	32	30	1.4	11	2.7	NA	220	2263a	12.9	63
oupe Bruxelles Lambert	988	2257	99	1	0	1.1	12	5.8	NA	193	4141a	9.8	71

n nonconsolidated results. ** Based on nonconsolidated earnings per share and consolidated book value per share. a) Based on 1991 data. b) Based on 1993 data. c) Partial year data be- iscal year change. 1) Global ranking calculated for Royal Dutch/Shell Group combining market value of the Netherlands' Royal Dutch Petroleum and Britain's Shell Transport & Trading. 2) nking calculated for Unilever by combining market value of the Netherlands' Unilever NV and Britain's Unilever PLC. 3) Global ranking calculated for ABB Asea Brown Boveri by combining lue of Sweden's ASEA and Switzerland's BBC Brown Boveri. 4) Global ranking calculated for Fortis by combining market value of Belgium's AG Group and the Netherland's AMEV. 5) Global alculated for Reed Elsevier by combining market value of Britain's Reed International and the Netherland's Elsevier. 6) Global ranking calculated for Eurotunnel by combining market value nnel (London) and Eurotunnel (Paris). Sales, profits, and assets in the individual country listings are for the three combined companies above; share price and relative ratios are for separate com-) Data for this company provided by Standard & Poor's Compustat Service. Unless otherwise noted, all other data provided by Morgan Stanley Capital International. LOSS = Negative ratio. t available. NEG = Negative return. NM = Not meaningful. NR = Not ranked.

THE GLOBAL 1000

COUNTRY RANK		GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL.	PRICE PER SHARE U.S. $	% CHANGE FROM 1992 (U.S. $)	(LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL.	PROFITS U.S. $ MIL.	ASSETS U.S. $ MIL.	RETURN ON EQUITY %
BRITAIN													
COUNTRY COMPOSITE			**694817**	**7**	**-5**	**11**	**3.0**	**16**	**4.0**	**633995**	**37003**	**2056387**	**15.2**
1	**British Telecommunications**	19	40701	7	0	17	2.2	21	4.7	20674b	1952b	33557	10.4
2	**Shell Transport & Trading** (1)	NR	31312	9	0	17	1.5	19	4.5	85923	4784	103559	7.9
3	**Glaxo Holdings**	31	28786	10	-33	-22	5.7	16	3.8	6396	1613	8872	34.6
4	**British Petroleum**	41	25977	5	-4	12	1.7	-36	3.5	51998	-715	54325	-4.6
5	**HSBC Holdings**	50	23782	10	56	82	1.9	10	3.6	NA	1907	266236	19.0
6	**B.A.T. Industries**	67	19790	7	-10	6	3.2	13	5.6	16771	1357	51045	24.9
7	**British Gas**	71	19646	5	-4	12	1.5	18	6.3	16012	1063	26984	8.4
8	**SmithKline Beecham**	75	18999	7	-10	5	12.1	17	2.6	8149	1137	7962	71.2
9	**BTR**	77	18675	9	8	26	6.5	18	3.9	13805	1057	14110	37.1
10	**Hanson Trust**	85	17198	4	-16	-2	3.3	11	6.4	13738	1700	32075	30.9
11	**Guinness**	112	14545	7	-34	-22	2.6	17	3.2	6813	818	12865	15.7
12	**Marks & Spencer**	114	14453	5	-17	-2	3.4	18	3.1	9292b	773b	6707	18.5
13	**Imperial Chemical Industries**	119	13902	19	-21	-8	2.1	-16	5.7	18833	-890	18929	-13.1
14	**General Electric Co.**	128	13424	5	21	41	3.2	17	4.0	14733	784	8885	18.5
15	**J. Sainsbury**	129	13399	8	-13	2	3.2	17	2.6	16037b	779b	7347	18.9
16	**Unilever PLC** (2)	NR	12867	16	-4	12	5.4	15	2.7	42896	2234	24800	36.9
17	**Grand Metropolitan**	136	12846	6	-34	-23	2.1	16	4.0	12356	974	14620	13.0
18	**Cable & Wireless**	147	12517	11	9	27	3.5	24	2.5	4966	506	7628	14.8
19	**National Westminster Bank**	151	11944	7	13	32	1.5	39	4.8	NA	300	223607	3.8
20	**Barclays Bank**	156	11540	7	4	22	1.4	-21	4.3	NA	-536	229853	-6.5
21	**RTZ**	174	10767	10	-8	8	2.3	21	3.7	7203	493	9478	10.9
22	**Lloyds Bank**	178	10669	8	5	22	2.5	15	4.4	NA	689	95252	16.3
23	**Wellcome**	185	10363	12	-33	21	5.6	19	2.3	2653	403	3086	29.8
24	**Prudential**	209	9505	5	11	30	12.1	22	4.7	11861	440	82057	55.9
25	**Reuters Holdings**	219	9224	21	-3	13	6.8	22	2.1	2448	407	2391	31.2
26	**Abbey National**	247	8383	6	17	37	1.7	17	3.6	NA	495	112131	10.0
27	**Allied-Lyons**	295	7216	8	-33	-22	1.7	12	5.1	7164	590	9647	14.0
28	**National Power**	307	7007	5	27	49	2.2	11	3.8	6789b	656b	6600	20.7
29	**Boots**	315	6868	7	-22	-9	3.1	16	4.1	5709	411	4199	19.4
30	**Tesco**	320	6778	3	-31	-20	1.6	10	4.1	12693b	653b	7070b	15.2
31	**Vodafone Group**	325	6735	7	-5	12	9.5	21	2.0	913	287	1026	45.3
32	**Great Universal Stores**	350	6339	26	-7	9	1.3	13	3.3	4055	483	6141	10.1
33	**Bass**	356	6196	7	-38	-28	1.2	12	5.5	5639	534	9414	10.3
34	**Rothmans International**	357	6190	10	-4	13	3.5	14	2.3	3763	428	5329	24.5
35	**Argyll Group**	366	6012	5	-17	-3	2.6	13	4.1	8649b	473b	4308	20.9
36	**BAA**	367	5986	12	0	17	2.0	18	2.6	1419	240	4850	11.1
37	**Reed International** (5)	NR	5611	10	-3	13	2.5	21	3.4	3843	451	6006	12.0
38	**Thorn EMI**	403	5555	14	-11	5	3.4	19	4.7	6407b	280b	4772	17.5
39	**Peninsular & Oriental Steam Navigation**	429	5199	9	-1	16	1.6	18	6.6	8632	288	9524	8.7
40	**Kingfisher**	437	5136	9	-9	6	2.2	20	3.0	5540b	231b	3482b	11.3
41	**Cadbury Schweppes**	441	5111	7	-19	-5	3.0	16	3.8	5266	305	4625	18.3
42	**BOC Group**	468	4849	10	-18	-4	2.2	31	4.6	4264	142	5308	7.3
43	**Commercial Union Assurance**	484	4773	9	2	20	1.8	56	5.5	8701	28	35056	3.1
44	**Inchcape**	495	4677	9	0	17	4.7	19	3.0	7865	242	4371	24.8
45	**TSB Group**	514	4535	3	11	29	1.7	NM	4.7	NA	12	40302a	0.6
46	**Lloyds Abbey Life**	516	4512	7	16	-2	2.5	15	5.3	2147	302	15904	16.6
47	**British Airways**	517	4511	5	-5	11	1.6	13	4.6	8698b	278b	8201	12.1
48	**PowerGen**	528	4437	6	26	48	1.9	12	3.9	4699	378	4745	16.6
49	**Land Securities**	535	4351	9	7	25	1.0	16	5.3	NA	265b	7358	6.1
50	**Scottish Power**	564	4084	5	17	37	4.0	12	4.4	2327b	344b	2528	33.3
51	**Sun Alliance & London Insurance**	568	4056	5	-9	7	1.7	-20	5.7	6917	-201	12687	-8.4
52	**General Accident Fire & Life Assurance**	587	3906	9	1	18	1.5	121	6.2	5983	-48	20649	1.3
53	**Waste Management International**	604	3806	10	-7	9	6.3	27	0.0	1276	129	1703	23.6
54	**Pearson**	611	3745	7	-13	2	2.2	23	3.5	2554	164	3356	9.9
55	**Tomkins**	615	3739	4	-20	-7	2.0	15	3.4	1989	132	1474	13.7
56	**Bowater**	618	3711	8	2	19	3.6	20	3.2	2358	155	2453	18.2
57	**Redland**	628	3626	8	21	-8	1.9	20	6.6	3263	164	5358	9.1
58	**Legal & General Group**	633	3584	7	2	19	8.7	26	5.2	3955	140	35384	34.3
59	**Royal Bank of Scotland Group**	652	3503	4	23	44	1.3	82	4.1	NA	17	53872	1.5
60	**Enterprise Oil**	657	3477	7	-10	5	2.5	25	4.4	840	127	4020	9.8
61	**Rank Organisation**	663	3450	11	-19	-6	1.6	104	5.6	3273	33	4781	1.6
62	**Reckitt & Colman**	684	3360	9	23	10	3.5	23	3.6	2974	147	2737	15.4
63	**Courtaulds**	687	3354	8	-18	-5	4.3	15	3.3	3034	236	2265	29.8
64	**Whitbread**	689	3343	7	-14	1	0.8	20	4.7	3621b	167b	5867	4.2
65	**Associated British Foods**	697	3290	7	-9	6	1.2	12	3.8	6174	259	4300	10.4
66	**United Biscuits (Holdings)**	705	3254	6	-15	-1	2.4	18	4.9	4869	173	3038	13.4
67	**ASDA Group**	723	3145	1	89	121	1.4	-7	2.6	7072	-537	4018	-20.2
68	**Thames Water**	738	3091	8	-4	13	1.3	9	5.2	1404	329	4138	14.0
69	**Ladbroke Group**	756	3024	3	-36	-26	0.8	-57	8.1	6506	-53	7238	-1.3
70	**British Steel**	763	2999	1	3	21	0.5	-20	2.1	7180	-53	9528	-2.4
71	**Rentokil Group**	784	2926	3	-8	8	13.0	24	1.5	740	121	537	54.0
72	**Scottish & Newcastle Breweries**	791	2903	7	-18	-4	1.5	13	4.9	2322	233	3426	11.7

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	GLOBAL 1000 RANK	MARKET VALUE U S $ MIL	PRICE PER SHARE U S $	% CHANGE FROM 1992 (U S $)	% CHANGE FROM 1992 (LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U S $ MIL	PROFITS U S $ MIL	ASSETS U S $ MIL	RETURN ON EQUITY %	INDUSTRY CODE
anada Group	792	2900	6	24	45	3.1	21	2.6	2092	123	2145	14.5	53
yal Insurance Holdings	798	2861	4	8	26	1.0	-61	2.3	5345	-130	14194	-1.6	63
ebe	817	2813	7	9	27	2.7	19	2.7	2545	144	2947	14.4	71
vern Trent	839	2735	8	2	20	0.9	7	5.4	1284	376	4428	13.4	52
andard Chartered	845	2714	11	26	48	1.7	-40	3.5	NA	-67	42660	-4.3	61
orth West Water Group	850	2701	8	6	10	1.0	8	5.7	1371b	347b	4191	13.1	52
ue Circle Industries	853	2693	4	-9	6	2.0	63	5.7	2139	41	3662	3.2	21
nk of Scotland	913	2484	2	0	17	1.5	23	4.2	NA	110	38632	6.5	61
rte	914	2481	3	31	19	0.5	14	5.0	4247b	180b	7547	3.8	53
olseley	921	2455	10	24	45	4.4	22	2.7	3051	92	1561	20.2	21
G. Warburg Group	936	2392	11	10	28	1.9	16	3.3	NA	134b	22111	11.6	61
riton Communications	949	2348	12	-1	16	3.9	21	3.0	1096	102	1300	18.8	52
illiams Holdings	953	2336	5	-22	-9	4.4	16	5.2	1607	141	1569	27.1	21
Group	955	2330	5	-20	-6	5.5	18	4.3	1705	109	2183	31.5	71
uardian Royal Exchange	957	2328	3	1	19	1.3	NM	5.2	4781	-5	19964	-0.2	63
ars	961	2315	2	11	4	1.2	23	4.5	3092b	98b	3170	5.1	54
orthern Foods	971	2292	4	-29	-17	5.2	14	4.1	2255	146	1415	38.5	44
nith & Nephew	981	2264	2	21	-8	6.6	14	4.2	1340	161	1321a	48.0	45
jo Wiggins Appleton	991	2253	3	-41	-32	1.2	15	4.7	4095	146	3695	7.8	23
AC Group	998	2240	11	0	17	1.88	24	3.5	4903	95	3484	8.0	21
rotunnel (London) (6)	NR	1705	6	-6	11	1.4	NM	0.0	NA*	-2	12257	-0.1	52
ADA													
RY COMPOSITE		**115068**	**22**	**10**	**16**	**1.9**	**22**	**3.0**	**84334**	**4928**	**606098**	**6.9**	
agram	172	10795	29	-1	5	1.7	16	1.9	6101b	677b	11876	10.5	43
E (Bell Canada Enterprises)	177	10682	35	-5	1	1.2	11	5.9	16334	1018	37966	11.0	55
orthern Telecom	234	8960	36	-8	-3	2.3	17	1.0	8409	548	9379	12.9	34
perial Oil	294	7217	37	0	6	1.4	32	3.8	7173	203	10367	4.4	11
yal Bank of Canada	305	7036	22	16	23	1.4	NM	4.1	NA	84	108688	-0.4	61
omson	308	6991	12	-1	4	2.3	42	3.7	5980	182	7907	5.5	51
nerican Barrick Resources	337	6557	23	85	96	6.6	33	0.3	540	175	1504	20.0	81
nadian Pacific	423	5298	17	12	18	1.1	-16	1.5	7045	-376	15891	-6.7	71
nk of Montreal	448	5060	20	10	16	1.5	11	4.4	NA	503	85693	13.6	61
nadian Imperial Bank of Commerce	461	4929	24	8	14	1.0	95	4.3	NA	9	95092a	1.1	61
can Aluminium	534	4354	19	-9	-4	1.0	-31	1.5	7596	-112	10146	-3.3	24
ronto-Dominion Bank	536	4348	14	6	12	1.2	20	4.1	NA	321	58258	6.0	61
acer Dome	543	4263	18	67	76	3.7	49	1.1	802	87	1624	7.6	81
ncanadian Petroleum	554	4149	33	55	64	3.2	25	1.9	747	134	2426	12.7	11
nk of Nova Scotia	561	4120	20	16	22	1.3	9	4.1	NA	531	76750	14.4	61
asco	661	3465	29	-4	1	1.4	12	4.0	6279	299	38130	11.6	71
ell Canada	673	3403	30	-15	-10	1.4	48	2.3	3530	63	4734	3.0	11
ova Corp. of Alberta	744	3075	8	6	12	1.9	22	2.5	2379	129	4864	8.8	12
oranda	762	3001	16	9	15	0.9	113	4.9	4393	104	11293	0.8	24
ansCanada PipeLines	882	2592	15	4	10	1.7	12	4.5	2953	259	6473	14.5	12
:o	920	2459	22	-24	-20	1.5	-51	1.8	2559	-18	4161	-3.0	24
idlaw	963	2315	8	-15	-11	1.5	20	1.5	1514	108	2876	7.5	52
MARK													
RY COMPOSITE		**15506**	**7667**	**-6**	**-7**	**6.4**	**47**	**1.3**	**4203**	**344**	**60981**	**9.5**	
ovo-Nordisk	672	3405	91	-1	2	2.0	16	0.7	1753	209	2756	12.1	45
mpskibsselskabet Svenborg	682	3366	22584	-7	-8	11.9	109	0.4	NA	31	333	10.9	58
mpskibsselskabet af 1912	683	3362	15565	-8	-9	14.5	124	0.5	NA	27	282	11.7	58
n Danske Bank	825	2764	52	5	4	0.9	-30	3.8	NA	91	55165	-3.0	61
rlsberg	877	2608	41	-20	-21	2.5	16	1.2	2451	167	2445	15.9	43
NCE													
RY COMPOSITE		**250122**	**188**	**1**	**1**	**1.8**	**25**	**3.1**	**403919**	**12149**	**1903642**	**8.6**	
Aquitaine	79	17997	70	-6	-7	1.2	16	5.2	37328	1149	46409	7.4	11
:atel Alsthom	94	16328	116	-4	-5	1.7	12	3.5	30085	1312	45460	14.1	34
Oréal	159	11380	196	15	14	4.4	28	1.4	6991	408	5930	15.8	45
N	179	10609	166	-13	-13	2.1	16	2.5	13182	677	13344	13.6	44
MH Möet Hennessy	180	10568	670	-10	-10	2.8	19	2.8	4030	560	9637a	15.0	43
mpagnie Générale des Eaux	181	10511	421	-5	-5	2.5	19	2.8	26610	541	34890	12.7	52
TAL	214	9405	49	0	-1	1.2	18	3.9	25493	530	21511	6.6	11
ciété Générale	235	8865	114	13	12	1.2	15	3.7	NA	608	264235	8.4	61
ion des Assurances de Paris	238	8753	104	5	4	1.4	44	2.1	23260	201	127186	3.2	63
Air Liquide	268	7833	137	1	1	2.4	19	2.9	5469	413	7307	12.7	22
mpagnie Financière de Suez	274	7688	52	-14	-14	0.7	-22	4.4	NA	-348	149330a	-3.4	61
IP	290	7332	104	41	40	0.8	18	2.0	NA	403	291775	4.4	61
a	292	7280	233	20	19	1.3	25	2.8	NA	288	123428	5.0	71
ribas	340	6538	74	-3	-4	0.9	40	4.6	NA	165	208969	2.4	61
ône-Poulenc	342	6430	102	-11	-12	1.6	22	3.3	15205	282	20906	7.3	22
rrefour	349	6352	496	-1	-2	3.6	26	2.0	21797	248	9691	14.2	54
mpagnie de Saint-Gobain	352	6265	89	-19	-19	1.1	14	4.5	13771	442	17650	7.6	26

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COUNTRY RANK		GLOBAL 1000 RANK	MARKET VALUE U S $ MIL	PRICE PER SHARE U S $	% CHANGE FROM 1992 (U.S. $)	(LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U S $ MIL	PROFITS U S. $ MIL	ASSETS U.S $ MIL.	RETU ON EQUI %
18	**AGF**	359	6130	111	19	19	1.5	22	3.0	NA	278	58281a	6.
19	**Peugeot**	460	4940	99	-33	-33	0.5	8	2.8	28843	627	22685a	6
20	**Canal Plus**	466	4877	237	8	8	5.5	24	2.9	1477	205	2603	23
21	**Crédit Lyonnais**	526	4445	118	8	8	0.6	-13	3.6	NA	-344	295a	-4
22	**Alcatel Câble**	562	4099	95	18	17	3.2	16	2.7	6538	255	5692	20.
23	**Lyonnaise des Eaux-Dumez**	584	3946	82	-21	-22	1.8	56	3.4	16814	71	24909	3.
24	**Havas**	625	3651	81	-19	-20	2.4	24	2.8	5244	153	3885	10.
25	**Lafarge Coppée**	632	3585	66	5	-6	1.5	16	3.8	5666	229	8923a	9.
26	**Thomson-CSF**	691	3325	30	-2	-3	1.0	12	5.6	6364	282	13243	■
27	**Pernod Ricard**	703	3257	69	-3	-4	2.4	16	3.4	2698	191	3258	15.
28	**Pechiney International**	708	3244	38	-2	-2	1.1	9	2.7	6574	366	7918	12.
29	**Elf Sanofi**	719	3172	168	-18	-18	1.4	16	4.0	3990	195	4170	8.
30	**Eridania Béghin-Say**	728	3124	138	9	8	1.2	13	6.1	9256	238	8292	■
31	**Carnoud Metalbox**	772	2966	37	8	7	1.5	16	3.0	4620	182	4723	9.
32	**GAN**	811	2832	78	-10	-11	0.9	46	1.4	8132	75	116282a	1.
33	**Accor**	823	2796	115	-22	-22	1.5	26	4.4	7977	108	6271a	5
34	**Michelin**	837	2740	26	-36	-36	1.3	186	1.6	12439	15	14550	0
35	**Groupe Schneider**	848	2705	121	-16	-16	1.5	48	3.0	11433	57	11785	3.
36	**Pechiney**	858	2680	53	21	21	0.8	71	5.3	12165	38	13132	1
37	**Crédit Local de France**	868	2647	74	66	65	1.7	12	3.5	NA	222	59527	13
38	**Crédit Commercial de France**	872	2634	45	25	24	1.3	14	2.5	NA	182	62970	9
39	**Compagnie de Navigation Mixte**	892	2552	179	-14	-14	0.9	32	6.3	NA	79	8199	2
40	**Promodès Group**	908	2497	147	5	4	3.6	24	1.3	15668	103	6206	15.
41	**Bouygues Group**	915	2478	125	8	8	1.9	19	3.6	11671	127	11210	9
42	**Cetelem**	938	2388	233	62	61	2.3	17	1.2	NA	141	10367	13
43	**Pasteur-Merieux**	980	2265	1861	50	49	3.7	31	0.6	1222	74	1770	11.
44	**Legrand**	982	2264	819	-10	-11	2.9	19	2.0	1907	122	2582	15.
45	**Eurotunnel (Paris)** (6)	NR	1749	7	-2	-3	1.0	NM	0.0	NA*	-2	12257	-0
GERMANY													
	COUNTRY COMPOSITE		**237571**	**384**	**-8**	**-9**	**2.2**	**21**	**3.8**	**513861**	**10908**	**1515335**	**11.**
1	**Allianz Holding**	40	26290	1348	-4	-5	3.6	56	1.0	30618a	239a	113451a	6.
2	**Siemens**	61	21328	381	-12	-13	1.8	14	3.3	49346	1128	45129	12
3	**Deutsche Bank**	69	19729	426	-3	-4	1.7	NA	3.5	NA	1128	311643	N
4	**Daimler-Benz**	92	16368	351	-30	31	1.5	19	3.6	61942	891	54167	7
5	**Münchener Rück.**	124	13505	1615	10	8	6.9	NA	0.6	9992	99	26336	N
6	**RWE**	153	11723	244	-2	-3	3.0	16	4.8	32519	551	34085	19
7	**Bayer**	167	10921	166	-10	-11	1.1	11	6.5	25893	953	24085	10
8	**VEBA**	169	10898	235	-8	-9	1.3	14	5.0	41118	617	32854	8.
9	**Dresdner Bank**	215	9401	231	8	7	1.4	NA	5.1	NA	596	204073	N
10	**Hoechst**	233	8998	154	-6	-7	1.3	14	5.7	28831	581	23199	■
11	**BASF**	251	8187	144	-7	-8	0.9	19	6.8	27984	387	24494	4
12	**Volkswagen**	347	6364	197	-23	-23	0.8	63	1.0	53679	49	47316	1
13	**Bayerische Hypotheken**	419	5360	251	5	4	1.4	NA	5.1	NA	227	138152	N
14	**Bayerische Vereinsbank**	431	5186	270	5	4	1.5	NA	4.7	NA	238	157762	N
15	**Mannesmann**	436	5161	161	-15	-16	1.5	18	3.7	15283a	247a	12363a	8.
16	**Commerzbank**	438	5130	179	13	12	1.1	NA	5.5	NA	439	145888	N
17	**BMW**	439	5128	285	-25	-26	1.3	9	4.3	19635	456	17285	14.
18	**Henkel**	507	4594	327	-16	-16	2.2	17	3.0	8862	216	6375	13
19	**Mercedes-Automobil-Holding**	550	4204	358	-8	-9	2.6	NA	3.6	NA*	87a	1717a*	N
20	**VIAG**	602	3810	212	-15	-16	1.7	12	4.2	14825a	198a	11873a	14
21	**Hochtief**	655	3482	696	-14	-15	3.9	NA	1.7	4045a	58a	3055a	N
22	**Vereinigte Elektrizätswerke Westfalen**	659	3470	173	30	29	2.7	21	3.7	4229a	94a	6412a	12
23	**Schering**	664	3449	505	2	0	2.1	21	2.5	3939	165	4419	9.
24	**Preussag**	678	3379	222	-15	-16	1.8	11	4.4	15383	295	8818	15
25	**Thyssen**	714	3226	103	-31	-32	1.1	12	5.7	22473	201	14805	9.
26	**Linde**	745	3071	449	-17	-17	1.9	17	3.3	4735	148	3904	10
27	**Karstadt**	830	2756	328	-16	-17	1.9	14	3.6	10765a	162a	4366a	13.
28	**Aachener & Münchener Bet.**	866	2652	585	-3	-4	1.6	NA	2.1	NA*	47a	1923a*	N
29	**Kaufhof**	897	2523	298	-4	-5	3.0	20	4.0	11217a	85a	3837a	15.
30	**Isar-Amperwerke**	905	2502	380	0	-1	6.6	62	2.1	1262	37	2640	10
31	**MAN**	911	2493	168	-33	-33	1.3	8	7.0	12050	256	11552	15.
32	**Victoria Holding**	974	2282	830	-4	-5	3.4	NA	1.2	3236a	30a	17354a	N
HONG KONG													
	COUNTRY COMPOSITE		**131475**	**3**	**16**	**15**	**2.9**	**17**	**3.2**	**32309**	**7767**	**134252**	**17.**
1	**Hong Kong Telecommunications**	91	16462	1	17	17	10.4	20	3.8	2802b	833b	2492	52.
2	**Hang Seng Bank**	169	14880	8	70	70	3.8	20	2.2	NA	738	33586	19
3	**Hutchison-Whampoa**	183	10463	3	13	13	2.1	24	2.5	2723	410	8355	8.
4	**Sun Hung Kai Properties**	200	9820	5	17	17	1.8	14	3.1	1380	606	7542	12
5	**China Light & Power**	245	8484	5	15	14	5.1	19	2.8	1735	411	2992	26
6	**Swire Pacific**	248	8376	5	12	12	1.4	15	2.5	5040	572	12457	9
7	**Cheung Kong Holdings**	259	8081	4	7	6	2.3	10	2.8	1331	811	4915	22
8	**Wharf (Holdings)**	379	5882	3	17	17	1.0	21	3.1	569	266	7675	4.
9	**Hongkong Land Holdings**	396	5670	2	24	23	1.3	19	4.5	NA	305	5716a	7.
10	**Jardine Matheson Holdings**	412	5436	8	-1	-2	2.7	17	2.4	7900	317	7973	15

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	GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL	PRICE PER SHARE U.S. $	% CHANGE FROM 1992 (U.S. $)	% CHANGE FROM 1992 (LOCAL)	PRICE/BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL	PROFITS U.S. $ MIL	ASSETS U.S. $ MIL	RETURN ON EQUITY %	INDUSTRY CODE
enderson Land Development	462	4897	3	24	23	2.7	12	2.3	NA	316	2769	22.3	64
ongkong Electric Holdings	475	4813	2	0	0	3.6	12	4.5	690	395	2501	29.8	12
ew World Development	508	4578	3	24	23	1.1	12	3.2	NA	306	5969	9.3	64
athay Pacific Airways	566	4080	1	−15	−15	2.4	10	3.8	3018	389	5672	22.6	56
ardine Strategic Holdings	712	3229	3	−2	−3	1.2	13	3.4	NA	251	4970	9.5	71
ongkong & China Gas	757	3008	2	30	30	7.3	25	2.3	383	121	727	29.2	12
opewell Holdings	778	2955	1	−5	−5	1.3	13	6.0	NA	210	2702	10.1	64
ank of East Asia	808	2836	5	44	43	4.5	32	2.1	NA	89	7928	14.0	61
airy Farm International Holdings	870	2643	2	−2	−3	3.6	15	3.4	4739	178	1856	24.5	54
orld International Holdings	922	2455	1	9	9	1.0	17	2.8	NA	126	2959	5.9	71
noy Properties	928	2428	1	33	33	1.1	17	4.0	NA	119	2495	6.4	64
AND													
RY COMPOSITE		**2518**	**4**	**29**	**40**	**1.9**	**13**	**4.3**	**NA**	**161**	**28030**	**14.1**	
lied Irish Banks	898	2518	4	29	40	1.9	13	4.3	NA	161	28030b	14.1	61
Y													
RY COMPOSITE		**72021**	**8**	**9**	**33**	**2.3**	**25**	**2.1**	**83303**	**3103**	**509584**	**8.5**	
ssicurazioni Generali	78	18249	25	3	25	3.3	48	1.0	9519a	384a	37269a	6.8	63
ET	228	9051	2	29	56	1.2	15	3.2	15635a	661a	43196a	8.2	55
P	258	8090	1	21	46	1.4	25	3.8	14679	313	36586a	5.9	55
at Group	267	7863	4	−9	10	0.9	26	1.7	40242	375	54661a	3.5	42
leanza Assicurazioni	404	5544	11	2	24	8.7	52	0.8	NA	110	7137a*	16.5	63
ruppo Bancario San Paolo	506	4596	7	−22	−5	NA	13	2.8	NA	342	106553a	NA	61
anca di Roma	551	4162	1	−22	−5	0.7	16	1.3	NA*	159a	44637a*	4.0	61
AS	585	3939	17	18	43	2.4	13	1.2	3228a	294a	11134a	18.7	63
ediobanca	600	3822	11	1	20	2.6	21	1.2	NA*	178	14914	12.2	61
anca Commerciale Italiana	613	3744	4	47	78	1.0	27	3.6	NA	149	89260	3.8	61
edito Italiano	775	2961	2	37	66	1.1	23	2.9	NA	138	64236a	4.8	61
AN													
RY COMPOSITE		**2532980**	**15**	**40**	**18**	**2.8**	**78**	**0.9**	**3155181**	**43632**	**10556752**	**4.8**	
ippon Telegraph & Telephone	1	140521	9008	81	52	3.5	79	0.5	59741	1783	107020	4.5	55
itsubishi Bank	6	73564	26	85	55	4.5	101	0.3	NA	700	483842	4.5	61
mitomo Bank	7	65970	21	78	49	3.1	335	0.4	NA	196b	575842	0.9	61
dustrial Bank of Japan	9	63215	27	86	56	4.9	167	0.3	NA	382b	413563	2.9	61
nwa Bank	10	61189	21	101	69	3.4	69	0.4	NA	887b	552161	4.9	61
ji Bank	11	60813	21	79	50	3.3	112	0.4	NA	541b	564977	3.0	61
ai-Ichi Kangyo Bank	12	57672	18	66	39	3.1	133	0.4	NA	439b	554168	2.3	61
yota Motor	13	56972	15	30	9	1.3	26	1.2	94866	2222	89452	5.0	42
kura Bank	15	49493	15	70	43	3.1	92	0.5	NA	539b	556212	3.4	61
kyo Electric Power	16	46262	35	58	33	3.5	67	1.4	43872b*	689b	108532	5.3	12
omura Securities	20	39562	20	79	50	2.4	144	0.5	NA	271	71707	1.6	62
ahi Bank	37	26856	12	104	71	2.7	80	0.6	NA	337b	281985	3.4	61
ank of Tokyo	38	26483	13	53	28	2.9	75	0.6	NA	353b	271707	3.8	61
ansai Electric Power	39	26320	27	42	19	2.7	36	1.7	22123b*	728b	55363	7.5	12
tachi Ltd.	43	25842	8	25	5	0.9	36	1.3	70382b	719b	82685	2.6	34
ippon Steel	44	25725	4	57	32	2.5	1379	1.5	27537b	19b	42966	0.2	25
atsushita Electric Industrial	47	25031	12	11	−7	0.8	70	1.0	65901b	355b	84197	1.1	41
kai Bank	49	24238	12	66	39	2.4	51	0.7	NA	236b	313591	4.7	61
itsubishi Heavy Industries	57	22394	7	44	20	2.4	23	1.1	26043	987	36656	10.4	38
ng-Term Credit Bank of Japan	58	22336	9	53	28	2.3	103	0.8	NA	218b	317213	2.2	61
shiba	59	21738	7	36	14	2.0	113	1.4	43219b	192b	53440	1.7	34
ven-Eleven Japan	65	20619	66	27	7	10.7	52	0.5	9913*	380	2962	20.6	54
ubu Electric Power	70	19702	27	34	13	2.4	38	1.7	18296b*	513b	45701	6.2	12
kio Marine & Fire	74	19187	12	56	30	1.1	100	0.6	10035	191	62307	1.1	63
issan Motor	82	17492	7	41	18	1.0	33	0.9	57874b	523b	66013	3.1	42
aiwa Securities	88	16799	13	81	51	1.8	−42	0.6	NA	−401	53832	−4.2	62
o-Yokado	95	16241	39	14	−4	2.7	27	0.8	28330b	605b	14669b	10.2	54
itsubishi Corp.	97	15773	10	26	6	2.3	59	0.7	166060b	268b	95790	3.9	59
aiwa Bank	98	15711	11	48	24	2.8	93	0.6	NA	169b	164249	3.0	61
ony	99	15640	42	24	4	1.2	46	1.1	37244b	336b	42285b	2.5	41
itsubishi Trust & Banking	101	15559	12	57	32	1.9	60	0.7	NA	258b	175012	3.2	62
mitomo Trust & Banking	105	15088	12	67	40	1.9	65	0.7	NA	232b	162952	2.9	62
ikko Securities	106	15062	10	102	69	1.9	−60	0.7	NA	−252	36843	−3.1	62
l Nippon Airways	107	14948	10	27	7	8.2	217	0.4	817	69	12297	3.8	56
EC	115	14370	9	24	4	1.8	34	1.0	32764b	422b	38094	5.1	34
ippondenso	116	14234	17	47	23	2.0	36	0.8	14188	392	13939	5.5	37
kyo Gas	117	14164	5	41	18	3.8	57	0.9	7692	250	12396	6.7	12
hoku Electric Power	118	13943	28	43	20	2.9	29	1.7	11603*	453	24802	9.8	12
pan Air Lines	121	13749	8	30	9	3.7	NM	0.0	12891	−124	18236	−3.4	56
eibu Railway	127	13428	31	70	42	31.3	2355	0.2	4910	6	8880	1.3	57
irin Brewery	130	13361	13	33	11	2.5	30	0.7	14935	446	12703a	8.4	43
itsubishi Estate	132	13097	10	38	16	2.9	34	0.7	4378	384	19780	8.5	64
ji Photo Film	135	12868	25	12	−6	1.4	18	0.7	10641	707	15238a	7.6	46
ijitsu	140	12780	7	36	14	1.2	−42	1.1	32297b	−304b	37254	−2.8	33

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COUNTRY RANK		GLOBAL 1000 RANK	MARKET VALUE U S $ MIL	PRICE PER SHARE U S $	% CHANGE FROM 1992 (U S $)	(LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U S $ MIL.	PROFITS U S $ MIL	ASSETS U S $ MIL	RETURN ON EQUITY %	US$ 3D
45	**Sharp**	141	12765	12	23	3	1.8	46	0.9	13815b	276b	20050	3.9	1
46	**Kyushu Electric Power**	142	12753	27	62	36	2.6	33	1.7	11323*	361	30860	7.8	2
47	**Asahi Glass**	144	12552	11	26	6	2.3	36	0.9	11649a	352a	13514a	6.4	6
48	**Nintendo**	145	12536	88	7	−11	4.1	15	0.7	5927b	827b	4828	27.0	6
49	**Osaka Gas**	148	12177	5	27	6	3.5	54	1.0	6235	224	10202	6.4	2
50	**Honda Motor**	149	12087	12	4	−13	1.2	34	1.1	38551b	358b	29460	3.5	2
51	**Bank of Yokohama**	150	11994	11	41	18	2.6	181	0.4	NA	66b	117343	1.4	1
52	**Mitsubishi Electric**	154	11657	5	41	18	1.6	44	1.7	30430b	266b	32195	3.6	[illegible]
53	**Mitsui Trust & Banking**	157	11520	10	42	19	1.8	138	0.8	NA	92b	142098	1.3	2
54	**Kinki Nippon Railway**	161	11330	7	32	11	5.6	77	0.6	8289	151	11859	7.2	7
55	**Kawasaki Steel**	162	11260	3	48	24	2.0	84	1.6	12872	134	19763	2.4	5
56	**Dai Nippon Printing**	165	11122	15	32	10	1.9	27	0.8	11612	409	11285	6.8	2
57	**Takeda Chemical Industries**	166	10934	13	43	20	2.2	35	0.9	6627	316	9135	6.3	5
58	**NKK**	170	10854	3	38	16	2.3	144	1.5	18025	75	29954	1.6	5
59	**Mitsui & Co.**	175	10728	7	45	22	1.8	66	0.9	160179b	164b	79408	2.8	9
60	**Sumitomo Metal Industries**	184	10452	3	42	19	1.9	36	1.7	16970	281	24951	5.2	5
61	**Nippon Express**	189	10220	10	77	48	5.6	38	0.6	15962b	270b	9843	14.7	7
62	**Shizuoka Bank**	190	10208	13	44	20	2.8	51	0.4	NA*	200	73415	5.6	[illegible]
63	**Canon**	192	10116	13	18	−1	1.5	30	0.9	17866	335	20078	4.9	5
64	**Mitsui Real Estate Sales**	193	10067	13	54	29	1.8	35	0.7	12732	290	33819	5.3	4
65	**Yamaichi Securities**	196	9950	8	79	50	1.4	21	0.6	NA	−485	37431	−7.0	2
66	**Nippon Credit Bank**	197	9881	57	7	10	1.9	58	1.0	NA	172b	169654	3.3	[illegible]
67	**Bridgestone**	201	9801	13	37	15	2.4	37	1.1	16335	265	16864a	6.5	[illegible]
68	**Chugoku Electric Power**	204	9644	27	59	33	2.7	32	1.8	8830*	288	20060	8.4	[illegible]
69	**Tokyu Corp.**	207	9591	9	84	54	4.1	370	0.5	4173	26	12847	1.1	[illegible]
70	**Kyocera**	208	9546	51	47	24	2.0	44	0.9	4238	253	6225	4.6	[illegible]
71	**Nippon Oil**	210	9496	8	37	14	1.8	33	0.8	26510b	289b	26435	5.4	[illegible]
72	**Yasuda Trust & Banking**	216	9401	9	27	7	1.8	117	0.8	NA	80b	109185	1.5	[illegible]
73	**Asahi Chemical Industry**	220	9222	6	20	1	2.3	54	1.3	11481b	170b	11637	4.2	[illegible]
74	**Toyo Trust & Banking**	222	9171	12	65	38	2.1	83	0.6	NA	169	83590	2.5	[illegible]
75	**Kobe Steel**	225	9131	3	24	4	2.3	−70	1.7	12415b	−131b	22795	−3.3	[illegible]
76	**Fanuc**	227	9102	38	14	−4	2.3	32	0.4	1494	288	4374	7.2	[illegible]
77	**Sankyo**	229	9025	22	13	−5	3.9	37	0.5	4481	245	4575	10.6	[illegible]
78	**Toray Industries**	237	8786	6	27	6	2.2	35	1.0	9059b	251b	11381	6.1	[illegible]
79	**Sumitomo Corp.**	239	8743	8	22	2	1.3	46	0.9	168300b	191b	57295	2.9	[illegible]
80	**Tonen**	241	8691	13	39	16	2.6	53	1.7	7402a	164a	7620a	4.9	[illegible]
81	**Kubota**	246	8415	6	41	19	2.9	161	0.9	8774b	52b	10126	1.8	[illegible]
82	**Komatsu**	250	8236	8	65	38	1.7	290	0.9	8121b	28b	13562	0.6	[illegible]
83	**Ajinomoto**	253	8174	13	24	4	2.5	76	0.7	6413b	107b	6983	3.2	[illegible]
84	**Sanyo Electric**	254	8160	4	16	−3	1.2	NM	1.4	14347	−12	19266	−0.2	[illegible]
85	**Toppan Printing**	255	8147	12	40	17	1.8	30	0.8	10268b	276b	10232	6.1	[illegible]
86	**Kajima**	269	7816	8	1	−15	2.2	14	1.5	20536	564	29478	15.7	[illegible]
87	**Sumitomo Electric Industries**	270	7795	11	38	16	2.3	29	0.8	10641b	272b	10566	8.0	[illegible]
88	**Matsushita Electric Works**	275	7652	11	21	2	1.8	45	1.1	9918	238	10088	4.1	[illegible]
89	**Shikoku Electric Power**	278	7588	28	59	33	2.7	33	1.7	4257*	225	11341	8.3	[illegible]
90	**Chiba Bank**	279	7552	10	45	22	2.2	58	0.5	NA*	144	82423	3.8	[illegible]
91	**Itochu**	282	7517	5	54	29	1.5	216	1.1	179968b	35b	77308	0.7	[illegible]
92	**Mitsubishi Kasei**	283	7516	5	37	15	2.7	134	1.2	11015b	56b	14215	2.0	[illegible]
93	**Sumitomo Chemical**	285	7493	5	27	6	3.4	49	1.2	9521	153	12116a	6.9	[illegible]
94	**Sekisui House**	291	7301	12	17	−2	1.4	20	1.4	11108b	365b	12863	7.0	[illegible]
95	**Yasuda Fire & Marine**	297	7194	8	63	37	3.4	55	0.8	7506b*	132b	32437	6.3	[illegible]
96	**Yamanouchi Pharmaceutical**	298	7174	22	9	−9	2.4	26	0.5	3332	306	6445	9.4	[illegible]
97	**Joyo Bank**	301	7148	9	57	32	2.5	50	0.5	NA*	160	70354	5.1	[illegible]
98	**KDD**	302	7139	111	51	26	2.6	49	0.4	2343b	147b	4916	5.2	[illegible]
99	**Kao**	303	7103	12	40	18	2.4	37	0.8	7197b	190b	6192	6.4	[illegible]
100	**Shimizu**	312	6918	9	5	−12	2.3	21	1.1	21749	329	29824	10.7	[illegible]
101	**Marubeni**	313	6900	5	39	16	1.6	669	1.2	161766b	10b	81966	0.2	[illegible]
102	**Daiwa House Industry**	314	6879	14	1	−15	2.1	18	1.1	8289	378	10869	11.3	[illegible]
103	**Tostem**	316	6864	31	39	17	2.7	43	0.4	4705	160	5735	6.2	[illegible]
104	**Taisei**	322	6755	7	17	−2	2.0	18	1.7	18940	378	29170	11.3	[illegible]
105	**Ono Pharmaceutical**	326	6724	55	8	−10	6.4	53	0.3	740*	126	1914	12.2	[illegible]
106	**Tobu Railway**	328	6683	8	62	36	4.7	142	0.6	2912	46	8514	3.3	[illegible]
107	**Nippon Yusen**	331	6646	6	46	22	3.1	109	0.7	8298	61	11849	2.8	[illegible]
108	**Taisho Pharmaceutical**	336	6558	19	43	20	2.9	24	1.0	1774*	261	2858	11.8	[illegible]
109	**Ishikawajima-Harima Heavy Industries**	353	6254	5	31	10	3.9	38	1.2	9708b	166b	13274	10.2	[illegible]
110	**Secom**	354	6202	58	21	1	4.1	58	0.7	2082	106	2986	7.0	[illegible]
111	**Sumitomo Marine & Fire**	355	6199	9	63	36	3.0	52	0.8	4369b*	119b	20265	5.8	[illegible]
112	**Mitsui Marine & Fire**	361	6102	8	54	29	3.2	58	0.8	4919*	105	22263a*	5.6	[illegible]
113	**Mitsubishi Motors**	363	6058	7	42	19	1.7	25	0.9	29684b	241b	21328	6.8	[illegible]
114	**Hokkaido Takushoku Bank**	364	6051	6	63	36	1.7	75	1.0	NA	81b	104929	2.3	[illegible]
115	**Toto**	365	6019	18	33	12	3.5	43	0.6	3950b	139b	3828	8.0	[illegible]
116	**Hachijuni Bank**	373	5930	10	24	4	2.8	51	0.5	NA*	119	53860	5.5	[illegible]
117	**Oji Paper**	375	5908	10	43	20	2.5	148	0.8	5862b	40b	8100	1.7	[illegible]
118	**Toyo Seikan Kaisha**	376	5894	29	15	−4	2.0	20	0.2	7272	298	5799	10.2	[illegible]
119	**Hokkaido Electric Power**	380	5862	27	67	40	2.8	45	1.7	4695*	88	12331	6.2	[illegible]
120	**Jusco**	385	5789	19	49	25	3.0	52	1.0	15224	111	8704	5.7	[illegible]

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ETRY	GLOBAL 1000 RANK	MARKET VALUE U S $ MIL	PRICE PER SHARE U S $	% CHANGE FROM 1992 (U.S. $)	(LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL	PROFITS U S $ MIL	ASSETS U.S. $ MIL	RETURN ON EQUITY %	INDUSTRY CODE
1 **Hanwa**	387	5776	15	26	5	1 6	100	0.8	6674	56	25800	1.6	59
2 **Hokuriku Electric Power**	388	5767	27	55	30	2 3	27	1.7	3976*	179	11696	8.5	12
3 **Nippon Paper**	391	5724	6	41	18	1.9	47	1.1	5255	64	6511	4.1	23
4 **Kawasaki Heavy Industries**	392	5708	4	27	7	5.0	43	1.1	10175b	134b	10849	11.7	38
5 **Hitachi Zosen**	395	5678	6	27	6	6.4	30	0.8	3715	187	4948	21.0	38
6 **Marui**	397	5660	15	48	24	1 8	29	1.3	5377b	193b	7370	6.3	54
7 **Murata Mfg.**	398	5645	27	52	27	1 9	26	0.5	2539b	221b	4359	7.3	35
8 **Nikko Kyodo**	401	5616	5	40	17	3.3	−30	1.1	9801	−152	9875	−10.8	11
9 **Gunma Bank**	405	5535	11	40	18	2.8	60	0.4	NA*	103	51592	4.7	61
0 **Bank of Fukuoka**	406	5526	9	37	15	2.5	47	0.5	NA*	115	63670	5.3	61
1 **Mitsubishi Materials**	411	5473	5	37	15	1.8	18	1.4	10884	328	13910	10.1	24
2 **Hankyu Corp.**	413	5432	6	37	15	3.5	67	0.7	3211	80	8808	5.1	57
3 **Ashikaga Bank**	414	5400	9	37	15	2.2	88	0.6	NA*	86	62858	2.5	61
4 **Shiseido**	415	5380	13	23	3	1.8	35	0.8	5162	149	5608	5.2	45
5 **Odakyu Electric Railway**	418	5370	8	28	7	4.2	90	0.9	5003	59	7975	4.7	57
6 **Shin-Etsu Chemical**	421	5351	17	34	12	2.4	23	0.4	4462	230	5736	10 1	22
7 **Mazda Motor**	425	5273	5	41	18	1.3	61	1.3	25408	87	15058	2.2	42
8 **Sumitomo Metal Mining**	440	5115	10	67	40	3.1	54	0.6	5031	94	6259	5.7	24
9 **Hokuriku Bank**	447	5066	7	16	−3	1.7	40	0.6	NA	128	75684	4.2	61
0 **Ohbayashi**	457	4980	7	40	17	2.0	23	1.1	14375	218	21787	8 8	32
1 **Isuzu Motors**	459	4965	5	103	70	5.4	−18	0.0	14748	−271	11745a	−29.6	38
2 **Kyushu Matsushita Electric**	464	4889	28	40	17	3.8	46	0.4	3239*	108	2491	8.2	41
3 **Sekisui Chemical**	469	4848	9	39	16	1.4	19	1 2	8149	255	9657	7.7	21
4 **Toyoda Automatic Loom Works**	479	4791	17	52	27	2.2	39	0.7	5442*	141	3785	5.8	38
5 **Asahi Breweries**	486	4752	11	25	5	1.8	131	0.7	8858	36	19052a	1.3	43
6 **Kyowa Hakko**	487	4750	11	32	11	3.4	106	0.6	3024	45	3624	3 2	45
7 **Sony Music Entertainment**	488	4732	46	40	18	6.5	55	0.5	1419	86	929a	11.8	46
8 **Mitsui O.S.K. Lines**	493	4688	4	35	13	3.6	215	0.9	5946	21	8653	1.7	58
9 **Ricoh**	496	4670	7	73	45	1.4	245	1 3	9493	19	11528	0.6	33
0 **TDK**	501	4615	35	5	−12	1.3	27	1.3	4914b	172b	5856	4.8	35
1 **Daiei**	512	4542	11	54	29	3.4	67	1.4	23523b	67b	13668	5.0	54
2 **Nisshin Steel**	518	4507	4	51	27	1.8	49	1.3	4471	92	6767	3.7	25
3 **Cosmo Oil**	523	4470	8	41	18	3.9	24	0.8	16522	184	11984	16.0	11
4 **Nagoya Railroad**	527	4440	6	31	10	3.2	70	0.7	3482	64	9912	4.6	57
5 **Teijin**	537	4335	4	25	5	1.5	39	1 3	5769b	112b	9397	4.0	22
6 **Daiichi Pharmaceutical**	540	4315	16	33	12	2.4	27	0.7	2072	160	3410	8 8	45
7 **Nippon Fire & Marine**	542	4282	7	57	32	2.4	47	0.9	3594*	91	17745	5.0	63
8 **Furukawa Electric**	545	4251	6	81	52	2.4	84	0.9	6739b	51b	7118	2.9	37
9 **Kinden**	547	4228	21	41	18	2.4	28	0 4	4294*	147	4850	8.4	32
0 **Eisai**	548	4225	16	52	28	2.6	30	0.7	2156b	140b	3096	8.8	45
1 **Kandenko**	567	4074	26	56	31	3.7	34	0.3	4854*	116	3807	10.8	32
2 **Bank of Hiroshima**	569	4031	7	31	10	2.0	58	0.7	NA*	105	62970	3.4	61
3 **Pioneer Electronic**	571	4023	22	−22	−35	1 3	28	1.0	5722	266	4847	4.7	41
4 **Nichii**	573	4010	15	43	20	1.8	42	1.4	11883	95	9765	4.4	54
5 **Mitsukoshi**	577	3996	8	23	3	3.7	−52	0.7	10081b	−76b	5252	−7.1	54
6 **Tokyo Electron**	579	3968	27	83	54	2.9	51	0.5	1839	78	2377	5.8	35
7 **Daishowa Paper**	580	3960	18	20	1	5.0	−46	0.3	3631	−85	7737	−10.9	23
8 **Dainippon Ink & Chemicals**	582	3954	5	30	9	2.2	182	1.1	8560	22	9535	1.2	22
9 **Yamazaki Baking**	583	3948	18	21	1	2.7	31	0.6	5441	126	3156a	8.4	44
0 **Tokyo Steel Mfg.**	588	3903	25	5	−12	2.2	29	1 1	1897b*	136b	2982	7 5	25
1 **Keio Teito Electric Railway**	592	3867	6	41	18	3.6	61	0.8	4135	63	5813	5.9	57
2 **Ebara**	594	3862	13	12	−6	3.6	57	0.6	3538	68	3764	6.3	38
3 **Matsushita Communication Industrial**	597	3836	20	23	3	2.1	35	0.6	5097	109	3227	6.0	34
4 **Showa Denko**	605	3798	4	47	23	3.1	−20	0.0	5274	−191	7888a*	−15.4	22
5 **Suzuki Motor**	610	3761	9	55	30	1.8	20	0.8	11659	185	7188	8 8	42
6 **NGK Insulators**	612	3744	11	32	11	2.5	56	0.7	2250	66	3057	4.5	37
7 **Isetan**	614	3740	17	-1	17	2.7	68	0.6	5563	55	4730	3.9	54
8 **Nippon Light Metal**	622	3694	7	33	12	2 6	33	0.6	6282	111	6332	7.8	24
9 **Mitsubishi Petrochemical**	624	3665	7	14	−5	1.9	37	1.0	4910	97	6430	5 0	22
0 **Chugai Pharmaceutical**	638	3566	14	67	40	3.6	79	0.5	1410	45	1881a	4.6	45
1 **Kumagai Gumi**	642	3557	5	17	−2	1.1	232	1.6	11855	15	20045	0.5	32
2 **Nissin Food Products**	643	3546	27	52	28	2.1	98	0.8	2278b	36b	2734	2.2	44
3 **Ube Industries**	647	3526	4	37	15	4.1	38	1.1	6627	92	8930	10.7	26
4 **Mitsui Engineering & Shipbuilding**	648	3522	4	22	2	4 0	70	0.9	3146	48	5404	5 7	38
5 **Showa Shell Sekiyu**	649	3518	11	7	−10	3.6	20	0.7	15309	175	7767a	18.0	11
6 **Fuji Electric**	650	3514	5	7	−10	2.1	33	1.5	8485	157	8049	6 4	34
7 **Nissho Iwai**	653	3483	4	25	5	1.6	44	1 1	105647	89	46047	3.6	59
8 **Keihin Electric Express Railway**	660	3467	7	43	20	3.9	75	0.7	2250	46	5987	5 1	57
9 **Hitachi Metals**	665	3449	10	62	35	2.2	53	0.9	4378	64	4513	4.1	25
0 **Shionogi**	671	3409	10	61	35	2.0	58	0.7	2959	59	3431	3 4	45
1 **Nikon**	679	3374	9	71	43	2.3	67	0.7	2539	50	3422	3.4	46
2 **Mitsubishi Oil**	686	3356	10	44	21	3.6	32	0 8	10025	106	7398	11.4	11
3 **Keisei Electric Railway**	688	3347	12	101	68	19 0	71	0.3	1802	47	3393	26.6	57
4 **Kuraray**	692	3319	11	15	−3	2.5	38	0.7	3295b	88b	4000	6.6	22
5 **Sapporo Breweries**	693	3304	10	28	7	2 7	111	0.5	5386	30	6661a	2.4	43
6 **NSK**	694	3303	6	31	10	1 5	57	1.3	4163	58	6280	2.6	37

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THE GLOBAL 1000

COUNTRY RANK		GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL.	PRICE PER SHARE U.S. $	% CHANGE FROM 1992 (U.S. $)	(LOCAL)	PRICE/BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL.	PROFITS U.S. $ MIL.	ASSETS U.S. $ MIL.	RETURN ON EQUITY %
197	**Tokyo Dome**	695	3299	21	44	21	4.4	388	0.5	1055	8	5204	1.1
198	**Nippon Meat Packers**	696	3295	14	12	−6	2.0	27	0.9	7057	123	4486	7.6
199	**Kokuyo**	699	3270	25	32	11	2.6	26	0.6	3062	124	2482	9.7
200	**Hasegawa Komuten**	707	3246	8	58	32	1.2	64	1.4	5255	50	12243	1.8
201	**Fujisawa Pharmaceutical**	711	3237	10	22	2	1.6	159	0.7	2595	21	4854	1.0
202	**Mitsui Toatsu Chemicals**	720	3151	4	33	12	2.1	46	1.4	4938	68	7389	4.5
203	**Citizen Watch**	722	3147	10	54	29	2.1	24	0.8	3846	131	3626	8.7
204	**Aisin Seiki**	724	3138	11	75	47	1.5	29	0.9	7468	109	5568	5.4
205	**Nichido Fire & Marine**	729	3124	7	37	15	2.2	37	0.9	3192*	84	14879	5.8
206	**Dai-Tokyo Fire & Marine**	731	3116	8	39	17	1.9	39	0.9	3547*	81	13040	5.0
207	**Fukuyama Transporting**	736	3100	11	55	30	2.4	30	0.9	2352*	132	2279	8.0
208	**Amada**	741	3085	11	19	0	1.4	25	1.2	1671	123	3647	5.4
209	**Omron**	749	3062	13	25	5	1.4	53	0.9	4509	58	5693	2.6
210	**Fujita Corp.**	750	3050	6	14	−5	1.6	19	1.7	7906	161	13199	8.5
211	**77 Bank**	753	3036	8	35	13	2.2	39	0.6	NA*	86	40428	5.6
212	**Arabian Oil**	754	3031	57	49	25	5.7	706	0.7	1438a	4a	1597a	0.8
213	**Chiyoda Corp.**	766	2989	15	14	−5	3.4	52	0.4	3603	58	3472	6.5
214	**Yamato Transport**	770	2975	10	34	12	2.0	40	1.0	5050b	74b	3392	5.0
215	**Fujikura**	771	2973	9	90	60	2.9	61	0.7	3090	48	4102	4.7
216	**Sumitomo Realty & Development**	774	2962	7	35	13	1.2	20	1.2	3220	147	17272	6.0
217	**Matsushita-Kotobuki Electric**	780	2952	19	29	8	2.0	45	0.7	2548*	77	2146	4.4
218	**Tokyu Land**	782	2945	6	84	54	2.8	151	0.7	4191	20	9208	1.9
219	**Meiji Milk Products**	783	2933	10	39	16	4.6	231	0.6	4341	13	2114	2.0
220	**Seiyu**	785	2925	13	38	16	2.8	30	1.1	12882b	97b	14262	9.3
221	**New Japan Securities**	789	2910	7	87	57	1.6	−8	0.4	NA	−360	10791	−19.6
222	**Orient**	795	2869	8	47	24	1.2	66	1.1	NA*	44b	65481	1.8
223	**Mochida Pharmaceutical**	796	2868	29	−3	−19	7.2	111	0.2	516*	26	638	6.5
224	**Oki Electric Industry**	800	2857	5	39	16	1.6	NM	0.7	6357	−5	7763	−0.3
225	**Chugoku Bank**	803	2850	14	34	12	1.6	40	0.4	NA*	62	40820a*	3.9
226	**Nippon Shinpan**	807	2843	9	62	36	1.5	81	1.1	NA	35	67759	1.8
227	**Hitachi Cable**	812	2827	8	48	24	1.9	32	1.1	3603	90	3236	5.9
228	**Onoda Cement**	820	2798	6	52	28	2.5	100	0.9	4901	28	6846a	2.5
229	**Kamigumi**	829	2756	11	53	28	3.1	36	0.8	1297	74	1871	8.6
230	**Yakult Honsha**	832	2754	16	43	20	1.8	29	0.9	1578	93	2220	6.1
231	**Casio Computer**	841	2723	10	4	−13	1.8	41	1.1	4032b	66b	4196	4.4
232	**Toyobo**	842	2722	4	20	0	2.8	40	1.2	5311	69	5438	7.2
233	**Sumitomo Heavy Industries**	843	2720	5	22	2	3.9	89	0.8	4481	31	6125	4.4
234	**Nihon Cement**	847	2707	8	63	37	1.9	34	0.8	2978	80	4383	5.6
235	**Green Cross**	849	2703	13	70	43	3.7	233	0.4	999	11	1411a	1.6
236	**Seino Transportation**	851	2701	18	27	7	1.5	47	0.6	3052	106	2899	3.3
237	**Nishi-Nippon Bank**	852	2696	7	24	4	1.9	39	0.7	NA*	64	36171a*	4.9
238	**Olympus Optical**	859	2675	12	24	4	2.0	75	1.0	2502b	36b	3518	2.6
239	**Meiji Seika**	864	2657	7	29	8	2.5	42	0.8	3192	63	2272	5.9
240	**Kankaku Securities**	869	2647	7	80	51	1.3	−8	0.4	NA	−343	7119	−17.1
241	**Bank of Kyoto**	871	2639	9	43	20	2.4	86	0.5	NA*	75	34818	2.8
242	**Uny**	873	2633	14	51	26	1.6	27	1.2	7253	98	4256a	6.1
243	**Tomen**	880	2594	4	33	12	2.4	51	1.3	74274	51	22151	4.6
244	**Nisshin Flour Milling**	881	2593	11	31	10	2.2	37	0.5	3454	69	2240	5.9
245	**Makita**	884	2582	16	6	−11	1.5	28	1.0	1671b	91b	2610	5.5
246	**Mitsui Mining & Smelting**	886	2579	5	86	56	6.3	58	0.7	4247	45	4057	10.8
247	**Toho Co.**	888	2572	165	64	37	2.9	30	0.6	1512	86	2090	9.7
248	**Toho Gas**	889	2568	4	36	14	2.9	61	1.1	2166	42	2922	4.8
249	**Nippon Sheet Glass**	890	2560	6	55	30	1.8	53	1.0	2782	48	4173	3.3
250	**Nippon Hodo**	891	2557	22	15	-3	2.3	42	0.5	2894*	61	2504	5.5
251	**Fujita Kanko**	894	2541	21	44	21	7.5	130	0.3	859a	20a	1525a	5.8
252	**Banyu Pharmaceutical**	899	2514	10	13	−6	1.7	46	0.7	980*	60	1894	3.7
253	**NTN**	900	2511	5	36	14	1.6	43	1.5	3024	58	4405	3.7
254	**Hino Motors**	906	2501	7	46	22	2.3	66	0.9	5946*	68	3374	3.4
255	**Snow Brand Milk**	909	2496	8	52	27	2.4	32	0.8	10081	77	4577	7.5
256	**Takashimaya**	910	2495	11	19	0	2.0	41	0.9	12704	62	7129	5.0
257	**Victor Co. of Japan**	912	2490	10	28	7	0.9	−6	0.0	7177b	−402b	6206	−13.9
258	**Mitsubishi Rayon**	916	2477	4	36	14	2.0	119	1.2	3146b	21b	4480	1.7
259	**Inax**	918	2464	10	33	12	1.6	61	0.7	2530*	41	2442	2.6
260	**Aoki**	924	2450	6	43	20	1.2	138	1.3	3958	18	7374	0.9
261	**Nippon Television Network**	930	2418	191	35	13	2.2	24	0.6	2100	103	1747	9.2
262	**Canon Sales**	932	2400	27	56	31	1.7	40	0.4	4947	60	3399a	4.2
263	**Tokyo Broadcasting System**	934	2399	14	44	20	1.5	147	0.5	1904b*	17b	2277	1.0
264	**Maeda Road Construction**	935	2397	24	9	−9	3.2	33	0.6	1699*	69	1141	9.8
265	**Konica**	941	2378	7	43	20	1.5	47	1.4	4985	50	5232	3.2
266	**Mitsubishi Gas Chemical**	943	2373	5	16	−3	1.7	51	1.2	2922	47	3993	3.4
267	**Tosoh**	944	2372	4	5	−12	2.7	NM	1.2	3640	−11	5707	−1.3
268	**NCR Japan**	948	2362	11	49	25	2.7	29	1.5	999*	80	1251a*	9.3
269	**Daikin Industries**	951	2339	9	5	−12	1.9	57	1.3	4004b	41b	4097	3.3
270	**Daido Steel**	954	2334	5	55	30	1.9	26	1.0	4275	91	4907	7.2
271	**Mitsui Petrochemical Industries**	958	2327	7	49	25	1.7	27	0.8	3370	87	4360	6.2
272	**Chiyoda Fire & Marine Insurance**	964	2312	7	49	25	2.0	40	1.0	3230*	58	10604	4.9

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special advertising section

COOPERATION IN A COMPETITIVE WORLD

JAPANESE BUSINESS LOOKS FOR STRATEGIC PARTNERS

Human Electronics—Technology for the Benefit of Mankind:

Unfortunately, a hole in the ozone layer may be coming to a town near you.

Dangerous rays from outer space are invading the earth. Holes in the ozone layer allow dangerous rays to slip through the earth's protective shell. These rays have been linked to many potential environmental and health hazards. And if you think these holes are just over the South Pole, you're wrong. They may be forming right over your head.

That's why Matsushita has developed a sophisticated ozone sensor, called the Improved Limb Atmospheric Spectrometer (ILAS), proposed and requisitioned by the Japan Environment Agency. It will yield extremely precise data, because it's the first satellite-mounted sensor that can simultaneously measure concentration, temperature and pressure in the ozone layer. It's also the first sensor with a thermal detector that does not require a cooling system. The Matsushita Ozone Sensor will be mounted on the Advanced Earth Observing Satellite to be launched by the National Space Development Agency of Japan.

Matsushita is hard at work phasing out the use of CFCs from manufacturing processes. And when the sensor begins its work, it will help identify other hazards to the ozone layer. At Matsushita, we're not only concerned about our products, we're concerned about our planet.

Matsushita Electric

Panasonic Technics Quasar

Even before the bubble burst and Japan slid into recession, major Japanese corporations were recognizing that the pace of frontier technological development has grown so fast, the products so complex, and the costs so great, that cooperation is essential.

Not even the largest companies can do everything. "The development of sophisticated technology is more than the capacity of any one company," observes Hitachi President Dr. Tsutomu Kanai. "Most companies now want to maximize their strength — and limit investment risk — by jointly developing technology and products through strategic alliances."

When The Bubble Burst Strategic alliances are nothing new to Japan. In semiconductors, for example, there are long-standing links between NEC and AT&T, Matsushita and Philips, Hitachi and Texas Instruments, Toshiba, and Motorola.

But the collapse of Japan's bubble economy has had an impact on corporate thinking. "It has affected the attitude of businessmen," comments Akira Nagata, president of Nikkei Business Publications, which publishes Japan's premier business weekly, *Nikkei Business*.

"Many are much more conservative," Nagata explains. "In the past, pumping money into fixed capital investments seemed logical because the expectation was that the economy would always be expanding. Now some companies are even beginning to lay off senior employees to save money."

A joint venture formed in 1989 between IBM Japan, Ltd. and Toshiba began producing LCDs for computer terminals in May 1991.

The Japanese economy is expected to be sluggish throughout the year. But there are qualitative as well as quantitative differences from the 1985-86 Endaka crisis, where the value of the yen suddenly appreciated, or the 1973-74 energy crisis. Weakness in traditionally strong, leading edge industries — such as high-tech electronics and consumer electronics — has dramatically affected the way businesses think of the future.

Alliance Instead Of Global Expansion While *Nikkei Business* believes the economy

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THE COMING TOKYO SUMMIT AND THE SPIRIT OF G-7 COOPERATION

The end of the Cold War gave the world new opportunities and challenges; the opportunities to realize true peace, further freedom and democracy and achieve prosperity; challenges to tackle regional conflicts; weapons proliferation; the global economy, the problems of developing countries and, environmental issues. The task incumbent upon world leaders is to make the best use of such opportunities, and effectively meet these challenges in a spirit of cooperation.

The 19th Economic Summit of the seven major industrialized nations and the EC will take place in Tokyo from July 7th through July 9th. It is expected to cope with just such a daunting task. The G-7 Summit, as we all know, started as an informal gathering of world leaders at the Chateau de Rambouillet in France. These leaders gathered to discuss the serious problems confronting the world in 1975. As the chairman of the 1993 Tokyo Summit, I wish to reinvigorate the original spirit of the G-7 Summit in which heads of state engage in substantial discussions on how to chart a new course for our cooperation in a changing world on the brink of the 21st century.

The main issues at the Tokyo Summit will be the world economy; our relations with the newly independent states of the former Soviet Union, in particular Russia, and; the issue of developing countries. Trade and the global environment will also be on the list. The Tokyo Ministerial Meeting of the Uruguay Round convened last month and has given a further push to carry forward the negotiations. Topics on the political side may include major regional issues and issues relating to securing world peace such as non-proliferation of weapons and the strengthening of the United Nations. The leaders of the G-7 countries and the EC are determined to hold in-depth and well-focused discussions on all these issues.

The spirit of cooperation among the G-7 leaders nurtured over the 18-year history of the G-7 Summit process now works throughout the year and has become as important as the three-day discussion at the time of the annual Summit. It is in this spirit that I called the G-7 Joint Ministerial Meeting on Assistance to Russia on April 14th and 15th in order to come up with a multilateral framework for assisting Russian reform. The meeting turned out to be a great success and an important step leading to the Tokyo Summit. I have also decided to invite President Yeltsin to this year's Summit. I hope the discussion with the President will further contribute to the promotion of reform efforts in Russia and to world peace and stability.

As Japan prepares to host the Tokyo Summit, I am becoming increasingly aware of the great attention and expectation the international community has for the Summit process especially in the Asia-Pacific region. As Summit chairman, meeting such expectations is indeed another challenge I am determined to face.

Kiichi Miyazawa

KIICHI MIYAZAWA
Prime Minister of Japan

TOKYO SUMMIT III-Moving Ahead

From 7 July to 9 July, the Heads of State of the G-7 and the President of the European Commission will gather in Tokyo for their annual economic summit to discuss economic, political and social issues facing the international community. The decisions reached, compromises made and agreements which they announce will greatly shape the direction of the world economy in the year to come. As the Chair of this year's Summit, Japan will play a vital role in striving to ensure that it is a success for the entire world. Prior to the Summit, Henry Scott-Stokes of The New York Times/TimesFax spoke with Japanese Deputy Minister for Foreign Affairs Kunihiko Saito about his expectations for the Summit. The following is a summary of their discussion.

Mr. Stokes: With the end of the Cold War and the disappearance of the structures which have defined international relations since World War II, there seems to be an even greater need for the major nations of the world to cooperate and coordinate their policies. How do you expect this to be reflected in the Summit?

Deputy Foreign Minister Saito: The question of how to shape the international community in the post-Cold War era is a matter of vital concern for all nations. While the confrontation between East and West has disappeared, the world is by no means a peaceful place. Indeed, many ethnic and religious conflicts which had been contained within the framework of superpower rivalry are rapidly coming to the surface. We are also seeing dangerous developments in nuclear proliferation. The collapse of the Soviet Union has made this a serious issue. Such a situation poses grave dangers for the entire international community. The G-7 nations account for almost 70% of world GNP. Looking beyond the economic sector, it is clear that over the last several hundred years, the nations of Europe and North America have stimulated the progress of humankind. Japan, now the second largest economic power, shares many common values with these nations. Although it is still fragile, the structure of the emerging new world order is of a tri-

Deputy Foreign Minister Saito

polar nature, centered on the United States, Japan and Europe. At the same time, it is also clear that this core group of nations alone cannot give rise to that new order. Rather, we must cooperate, coordinate our polices and demonstrate leadership in a global partnership which will guide the world in this complicated age. The annual economic summit is the most important opportunity for us to gather and reconfirm that partnership.

Mr. Stokes: Specifically, what do you expect to be the main focus of discussion at the Summit?

Mr. Saito: Obviously economic issues will form one core. Many G-7 economies remain stagnant. For our own prosperity, and clearly for the prosperity of the developing nations of the world, it is vital that we realize economic recovery. Finding the means towards that end will certainly be high on the agenda this year. The issue of stimulating the world economy is one of true urgency. We must expand the economies of all G-7 nations. In particular, Japan, as the only G-7 nation with a trade surplus, must stimulate its economy, increase imports and solidify a domestic-demand-oriented market structure. Two other major agenda items come to mind; issues relating to the former Soviet Union, including assistance to the Russian Federation and the plight of developing nations around the world. In addition, the Heads of State will be discussing political issues. They are likely to focus on the many regional issues around the globe requiring urgent attention. The situations in former Yugoslavia and in Cambodia will certainly need to be discussed. In addition, the issue of the non-proliferation of both nuclear and conventional arms is a most pressing one. Particularly in light of certain developments over the last few months, this is an area which requires the kind of multilateral coordinated approach which the G-7 can lead. There will most certainly be some discussion about the United Nations as well. As the emerging world order is one requiring increasingly broad-based cooperation and coordination, the role expected of the United Nations is growing. In order to ensure that it can meet such expectations, there is a need to strengthen the functions of the United Nations and to reform its organizations to bring them more in line with current realities.

Mr. Stokes: What is Japan's role in that process, especially in light of the fact that it is the Chair of the Summit?

Mr. Saito: The role that Japan is expected to play in the international community has changed tremendously over the last few years. In the past it was sufficient for Japan to passively respond to requests from the international community as they arose. That is no longer the case. Japan's actions now have a significant effect on international situations. The nations of the world now look to Japan and ask "What is Japan trying to do about this or that conflict?" and "What will Japan do to help solve this or that regional issue?" This is a new situation for us, and we are not always ready to respond exactly in the way that the international community expects us to. Hence, in formulating foreign policy, Japan faces the two-

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fold challenge of coping with the increasingly complex international situation, and playing new and important roles within that context. It is a challenge which we welcome. At the same time we are aware of the great responsibility which we must bear.

Mr. Stokes: Within the context of the global partnership which you have mentioned, how do you view Japan-United States-Europe relations?

Mr. Saito: It is clear that if Japan is to meet the new challenges it faces, close cooperation with the United States is indispensable. Our bilateral partnership with the United States extends across a broad spectrum. Indeed, Japan, the United States and Europe share a great responsibility for maintaining and promoting the system of free trade. If Japan, the United States or Europe moved towards protectionism it would surely result in a reduction in overall global trade. We must cooperate to prevent that. In even broader terms, we must cooperate in our approach to issues of a global scale such as the environment, AIDS and population growth. In the political sector, unlike the United States and two of the nations of the European Community, Japan is not a Permanent Member of the United Nations Security Council. Japan is also limited by its Peace Constitution in the contributions it can make to military operations. Still, Japan is expected to cooperate to the fullest extent possible to assist in solving issues through peaceful means. Japan's commitment to meeting this expectation is clear from, among other contributions, the dispatch of over 700 Japanese personnel to take part in peacekeeping operations implemented under the United Nations Transitional Authority in Cambodia.

Mr. Stokes: Earlier you mentioned assistance to Russia as one of the points to be discussed at the Summit. What is Japan's stance on that issue?

Mr. Saito: Japan supports the efforts toward reform through the introduction of democracy and a market economy which have been pursued under the administration of President Boris Yeltsin. In this regard, we are one with the other G-7 nations. Indeed, Russia is our neighbor. It is clearly in our own interest for that nation to overcome its current domestic confusion. However, there remains the question of the territorial issue. Japan hopes to conclude a peace treaty by settling the territorial issue and thereby fully normalize relations with Russia. At the same time, we are pursuing balanced expansion of political and economic relations with Russia. This idea was introduced a few years ago and is rooted in the concept of

the inseparability of politics and economics There will always be a link between economic relations, economic cooperation with Russia, and the territorial issue. We believe that this new concept of balanced expansion is a positive concept. Under this idea, we want to develop both political and economic relations with Russia. At one time, economic relations may move ahead, and we hope that advanced economic relations might favorably affect the political arena. So instead of rigidly relating these two areas and refraining from developing economic relations unless progress is made in political relations, we are now trying to develop the two aspects at the same time. More specifically, we have been trying to develop our economic relations, including economic assistance, expecting that this development in the economic area will have a positive effect on our political relations.

Mr. Stokes: You've spoken extensively on the need for cooperation and coordination among the advanced nations. Specifically, what areas do you see as requiring particular attention in this manner?

Mr. Saito: One area in which the United States, Europe and Japan need to work together is non-proliferation. As the only nation to have experienced atomic devastation, Japan is particularly aware of the dangers of nuclear proliferation. This is an issue of primary importance for the international community. I mentioned earlier that this was a problem which has been complicated by the breakup of the former Soviet Union. As things stand, the Russian Federation, Ukraine, the Republic of Kazakhstan and the Republic of Belarus all possess deployed strategic nuclear weapons. Ukraine and Kazakhstan have yet to accede to the Nuclear Non-Proliferation Treaty. As the leaders of the world, the United States, Europe and Japan must work together and demonstrate leadership on this matter. Closer to home, the decision by North Korea to withdraw from the NPT is a challenge to the non-proliferation regime. The United States, Japan and the Republic of Korea are already cooperating to persuade North Korea to reverse that decision. With the entire international community expressing concern over this development, I believe that this is an area in which cooperation among the United States, Japan and Europe can be particularly effective.

Born on 2 February 1935, Kunihiko Saito entered the Ministry of Foreign Affairs in 1958. During the 1970s, he served as Director of the Second North America Division and the Treaties Division and then as a Minister at the Japanese Mission to the European Community. In the 1980s he was Director of the Financial Affairs Division and then Deputy Director-General and subsequently Director-General of the Treaties Bureau. In 1989, he was appointed Ambassador to Iran. Mr. Saito rose to his current post as Deputy Minister for Foreign Affairs in 1991. When he is not involved in international negotiations, Mr. Saito enjoys playing the piano and mahjong.

NEC OPTS FOR N AND A

NEC President Dr. Tadahiro Sekimoto has a knack of finding the right label for new concepts. He dubbed his company's emerging pattern of worldwide interconnectedness 'mesh globalization.' The phrase aptly captures the way in which NEC Electronics in Roseville, California, for example, interacts directly with NEC Electronics in Singapore

Dr. Sekimoto's new term is 'N&A' for Network and Alliance. In Dr. Sekimoto's concept, strategic partners come together, network, and become allies. "These alliances improve each partner's competitiveness," he explains

"The need for 'N&A' arises from the continuous demand for new products, the rapid advance of technology and the rising price tag for technological innovation," Dr. Sekimoto observes.

EXPANDING RANGE OF ALLIANCE

Toward this end, NEC has established a wide range of relationships. It is working with AT&T Microelectronics. It has a tie-up with MiPS in RISC chips. With IBM it is collaborating on supercomputers and PBXs, while it is linked with DEC in PBXs and minicomputers. With Bull of France its partnership focuses on large computers.

Key to these relationships, Dr. Sekimoto emphasizes, are the principles of mutual benefit and mutual trust. "Without these, the partnerships will not work," he points out.

WIDER IMPLICATIONS

"Concepts like 'mesh globalization' and 'N&A' have only just begun at NEC and are not widely recognized in Japan or elsewhere," Dr. Sekimoto acknowledges. "But in the next three to five years, these concepts will deepen and be much more widely understood. If I look at a ten year horizon, I think we will begin to achieve a borderless world economy."

TADAHIRO SEKIMOTO
President

hit bottom in the first quarter of 1993, many industries are still being squeezed by sluggish demand at home, the soaring value of the yen, higher real finance costs, and excess plant capacity build up during the go-go '80s. It is not surprising, therefore, that business confidence levels are not strong.

The Japanese government's efforts to jumpstart the economy — including discussions of a major increase in infrastructure spending — in practical terms are still focused more on trying to restore confidence in, if not stability to, the country's battered financial markets and banking sector.

As a result, there has been a significant shift in Japanese corporate strategic thinking. The 1980s emphasis on globalism — on planting the flag around the world — has given way to restructuring at home and creating strategic alliances internationally. The Hitachi Group currently has 216 foreign subsidiaries, almost double the total of five years ago.

The new importance of strategic alliance in corporate thinking begins with cost-

Turn to page 2

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"Hitachi does business in over forty countries," says President Tsutomu Kanai. "So we have a global responsibility to be a good corporate citizen."

A "GREEN" COMPANY

That responsibility begins with commitment to the environment. "Every aspect of our operations, R&D, manufacturing, products, sales, and services has to be environmentally conscious," says Kanai.

Hitachi, winner of several environmental awards, began going "green" more than twenty years ago. This year it will eleminate the use of CFCs as a cleaning agent and by 1995 it will have phased out CFCs and trichlorethanes used in products. Its plan for the 90s also includes a 35% cut per unit in energy use and a major reduction in industrial waste.

TSUTOMU KANAI
President

A LEADER IN INNOVATION

Hitachi is also committed to innovation. Annually 6%-7% of sales go to R & D, in both basic and applied research. The company's Advanced Research Laboratory, for example, is working on the foundations of technology ten to twenty years down the road.

The Hitachi Cambridge Laboratory, in collaboration with Cambridge University is working on single-electron memory — the first step to developing semiconductors with 4,000 times the capacity of today's mainstream memory chips.

In the U.S., Hitachi's Advanced TV & Systems Laboratory in Princeton, New Jersey, has developed a prototype digital VCR that is compatible with U.S. formats.

GLOBAL PARTNERSHIPS

Hitachi is forging strong strategic alliances around the world. "We are developing a next-generation DRAM with Texas Instruments," says Kanai, "a new gas-turbine with General Electric, a new RISC chip with Hewlett-Packard, and medical equipment with Germany's Boehringer-Mannheim."

Hitachi's emphasis on partnership extends beyond product development. It is providing Korea's Goldstar Electron with DRAM manufacturing technology and acts as an OEM reseller of Goldstar's DRAM products. Hitachi also sells IBM PCs on an OEM basis. It has a joint venture with GE to sell GE lighting products in Japan. In addition it supplies mainframe computers to Germany's Comparex and Italy's Olivetti.

WORLD-WIDE PURCHASING

Hitachi is committed to reducing Japan's trade surplus. In this regard the company is reducing its exports and increasing its imports and local manufacturing. Over the last five years its overseas procurements have increased some 70%.

"We are aiming to make it easier for foreign companies to provide Hitachi with products and materials," says Kanai.

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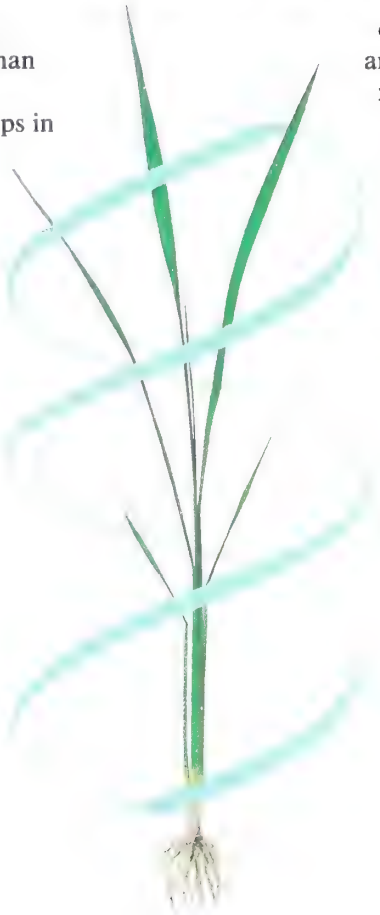

But genetic engineering and plant research are just part of a whole world of research that Mitsubishi Kasei is involved in. From basic chemicals and materials to electronics and pharmaceuticals, we're pioneering many products and processes that make life richer, healthier and easier for people everywhere. That's because turning research into reality is something we do best. To get a more detailed look at Mitsubishi Kasei, call or write for our annual report. You'll see how we're helping to feed a world that's hungry for more than just new ideas.

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effectiveness. "It is a way to reduce the cost of innovation and of manpower," observes Tsuyoshi Kawanishi, Senior Executive Vice President at Toshiba. Strategic alliances can also improve the efficiency of R&D, sales, and manufacturing while enhancing product marketability by developing second sourcing capability.

Technology A Driving Force It is not merely the cost of technological innovation alone that encourages strategic alliances, but technology's increasing sophistication as well. No one company can be master of all technologies. To attempt that, risks being master of none.

Then there is the speed of development and the need to be able to pull together resources for a quick response to competitors' innovations. Comments NEC President Dr. Tadahiro Sekimoto, "Market conditions change almost day by day. It is important to have good partners who can work with you to meet those changes. Strategic alliances help improve each partner's competitiveness."

"Especially for manufacturing companies," notes Komatsu President Tetsuya Katada, "R&D strength gives the competitive edge and that's why strategic alliances are increasingly so important."

Komatsu, for example, which is strong in large diesel engines is in the process of teaming up with Cummins Engine of Indiana, a specialist in smaller diesels. Their alliance should eventually include not only the production and cross-marketing of their respective product lines, but also collaboration on new models

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Great Flavor Knows No Boundaries

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nformation technology — IT — is a global industry," emphasizes Fujitsu Managing Director Michio Naruto. "You can't confine your business to only one country

"But to be successful," Naruto adds, 'business must reflect the culture of the particular location. There has to be global ocalization. You need to respect individual cultures. That's

left
TADASHI SEKIZAWA
President
right
MICHIO NARUTO
Managing Director

why Fujitsu strives to be a cross-cultural company." Fujitsu buys from and sells to AT&T, IBM, Olivetti, Siemens as well as many of Japan's leading electronics and telecommunications companies. "As technology develops, however, simply buying and selling are not enough," Naruto continues. It becomes necessary to enter into more sophisticated relationships where resources and know-how are shared to create specific products. A good example of this would be Fujitsu's partnership with Sun Microsystems to develop the SPARC® RISC chip

Companies need to pool resources to develop new technology. Here Fujitsu has a long history. It has worked with Amdahl of the U.S since 1972, Germany's Siemens since 1978 and Britain's ICL since 1981

TIME, INDEPENDENCE AND RESPECT

Naruto believes there are two key elements in a successful strategic alliance. The first is time. The relationship must be allowed to develop and mature. The second is that both parties maintain their independence and respect for each other

All these are even more important in Fujitsu's alliance with ICL, since Fujitsu now has an equity stake in the U.K. company. "ICL is autonomously managed," points out Naruto, who heads a 15-man team representing ICL's interests at Fujitsu headquarters. "There are differences of opinion. There are even conflicts, as would be expected between any two companies."

ICL AND FUJITSU — VALUABLE SYNERGY

But far more important than any differences, Naruto emphasizes, are the synergies between Fujitsu and ICL — in products, R&D, marketing, and human resources. Fujitsu provides ICL with its automated teller machine and notebook computers. Fujitsu markets ICL's UNIX servers. An ICL PC uses Fujitsu components to achieve multimedia capability

R&D obviously will be an important area for cooperation. Personnel exchanges are already underway and R&D planning meetings take place semi-annually. Generally Fujitsu supplies computer technology, while ICL brings problem solving-methodology

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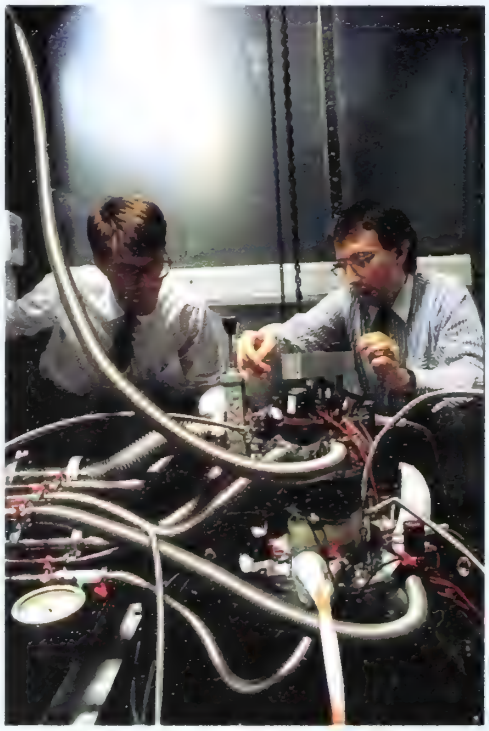
Alliance In Evolution For Japanese companies, strategic alliances usually evolve out of older transactional relationships. "We have a long relationship with AT&T," remarks Dr. Sekimoto speaking of NEC's allies. "IBM has been a competitor for many years. Bull was introduced to us by Honeywell, an old customer."

Fujitsu Managing Director Michio Naruto notes that alliances often begin with the development of specific products. For example, Fujitsu first got to know Sun Microsystems by supplying components and peripherals. Later, Fujitsu Microelectronics in California collaborated with Sun to develop the SPARC® RISC chip, which helped revolutionize the workstation market.


Shunsei Takei

Hitachi depends on mutual understanding at every stage of the collaborative process.

Hitachi is working with Texas Instruments on the next generations of DRAMs, while Toshiba has a three-way alliance with IBM and Siemens on 256M DRAM process technology which will bring some eighty Toshiba engineers on exchange to the U.S.

The next stage involves tackling new technologies. Matsushita, for example, worked with Philips to develop the technology for the digital compact casette. It is working with Gain Technology of the U.S. on multimedia workstations.

Toshiba teamed up with IBM Japan in the mid-1980s to develop large-size color LCDs. This led to a joint venture to produce the resulting product.

At first glance Hitachi's tie-up with Cambridge University through the Hitachi Cambridge Laboratory may seem to differ from this pattern. But there are close personal links behind the collaboration which is now probing frontier semiconductor memory technology.

Some alliances are extremely far-reaching. Fujitsu has been supplying technology to ICL since the early 1980s. More recently, this was cemented with Fujitsu taking a majority stake in the British company, although ICL remains autonomously managed. This allows for an even closer collaboration on product development and a global rationalizing of marketing for some product lines to achieve better customer service and competitiveness.

What Partners Must Bring "For a strategic alliance to be successful," notes Toshiba's Kawanishi, " each partner must have some competitive core skill and during the alliance must work to maintain its technological power. At Toshiba, in fact, we think that being in an alliance requires us to work harder!"

At some companies, Kawanishi continues, there is a tendency to want to establish linkages to bolster areas of weakness. This inevitably leads to trouble. "Alliances work well only if based on mutual strength," he emphasizes.

TOSHIBA'S ALLIANCES ARE A CORE STRATEGY

"The best way to improve international relations is to create transnational strategic alliances," observes Senior Executive Vice President Tsuyoshi Kawanishi. "It is a way to ensure co-existence and co-prosperity."

The key to a successful alliance, in Kawanishi's view, is for both parties to have strong core skills in the area of the alliance. "If one party does not have these, the cooperative results aren't good," he notes

TSUYOSHI KAWANISHI
Senior Executive Vice President

With the rapid advancement of high technology, the risks and costs involved in product development have ballooned, and it is clear that the scope of technology is too broad for any one company to pursue innovation in all key areas. Thus, Toshiba is actively engaged in international alliances that reduce developmental costs and lead-times, minimize risks, and achieve complementary partnerships

Toshiba has been working with Motorola for eight years, combining Toshiba's strength in semiconductor memories with Motorola's capability in microprocessors. Its collaboration with IBM Japan on large-size color LCDs began in 1986

STRENGTH THROUGH STRATEGIC ALLIANCES

Toshiba's skill in developing alliances, is evident from their number and extent. It has launched a key partnership with IBM and Siemens to develop the next generation of semiconductor chip, 256M DRAMs, using quarter-micron technology.

Toshiba has teamed up with IBM to bring to market advanced solid-state data storage devices using flash memory chips. Also, in the field of flash memories, Toshiba has established alliances with National Semiconductor in the U.S. and Samsung Electronics in Korea.

Toshiba is working with Apple Computer to exploit the potential of multimedia technology — with the aim of jointly developing a personal digital assistant product range. In the field of visual media and information, the company took a stake in Time Warner Entertainment, which now manages Time Warner's movie and television production and distribution, cable system operations and cable programming businesses, and will create a comparable operation in Japan.

Sanyo Vice Chairman Dr. Masaru Yamano remarks that early on his company had a successful alliance in the vending machine industry in Japan. Unfortunately, when the U.S. party got into financial difficulties at home, the Japanese partnership had to be closed down.

"Each partner must bring a different ability for the relationship to work well," adds Kikkoman Executive Managing Director Yuzaburo Mogi. This, he continues, applies even in situations where no technological exchange is involved. Kikkoman, for example, has a successful link-up with President Foods in Taiwan, where Kikkoman contributes

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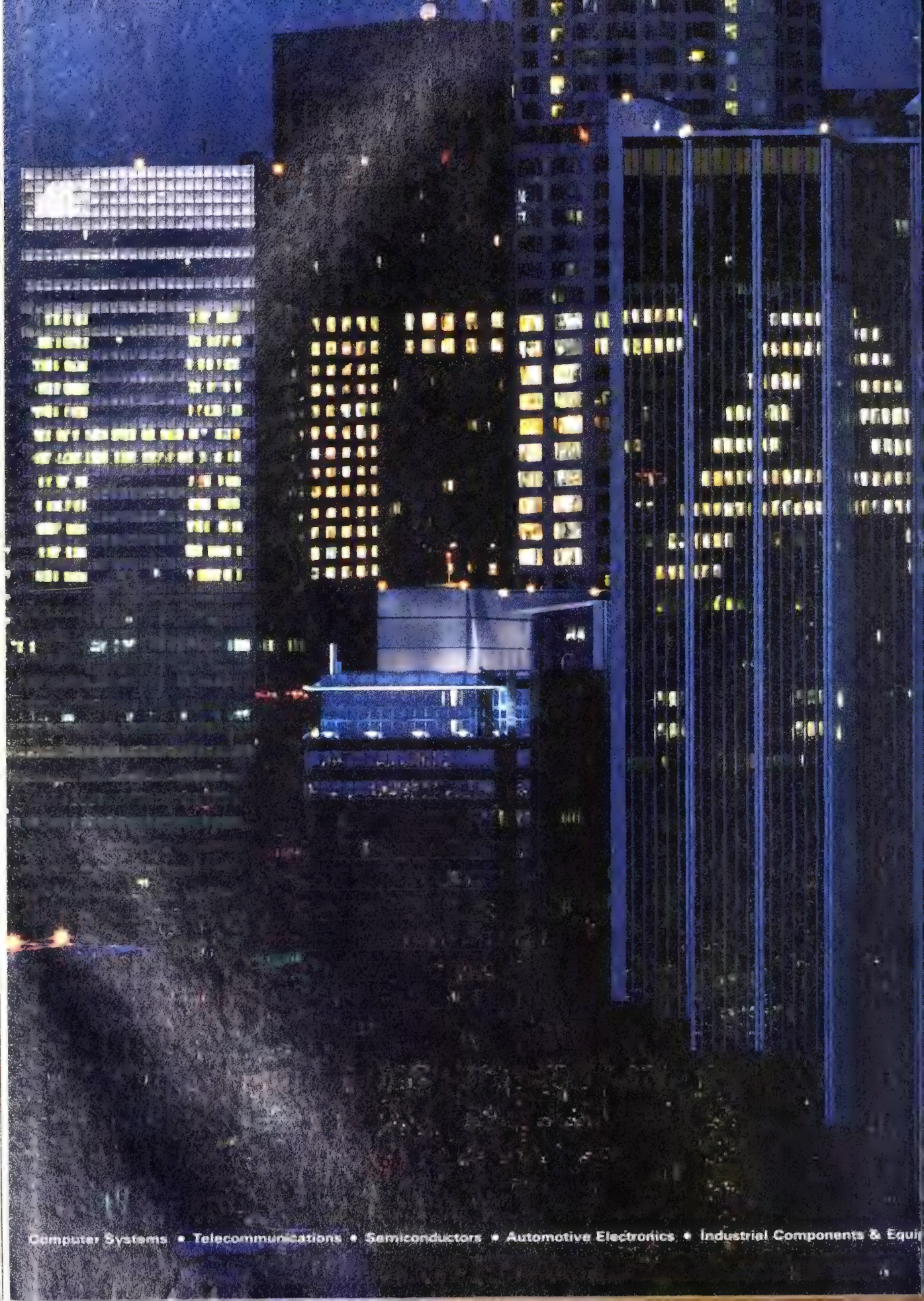

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MATSUSHITA: VALUE-ADDED MANAGEMENT FOR GLOBAL PARTNERSHIPS

"Matsushita emphasizes adding value not only to its products, but to its management," says Senior Managing Director Tadakazu Yamamoto. This applies not only in Japan, but to its worldwide network of operations and alliances

Matsushita has collaborated with Philips Electronics to develop digital compact cassette technology. It also has product and services ventures — such as joining forces with a Japanese retailer to bring the L. L. Bean product line to Japan

MUTUAL BENEFIT

"Matsushita takes the view that any venture must be of benefit to all parties concerned," says Yamamoto. This is particularly true where technology is concerned. Here, the rationale for cooperation is the increasing cost of R&D and its growing complexity. Given this, cooperative ventures are increasingingly important in Matsushita's approach. In the field of multimedia alone it is partners in EO Company with AT&T and Marubeni, in 3DO with AT&T, Electronic Arts, MCA and Time Warner, and in General Magic with Apple, AT&T, Motorola, Philips and Sony.

REDUCING FRICTION

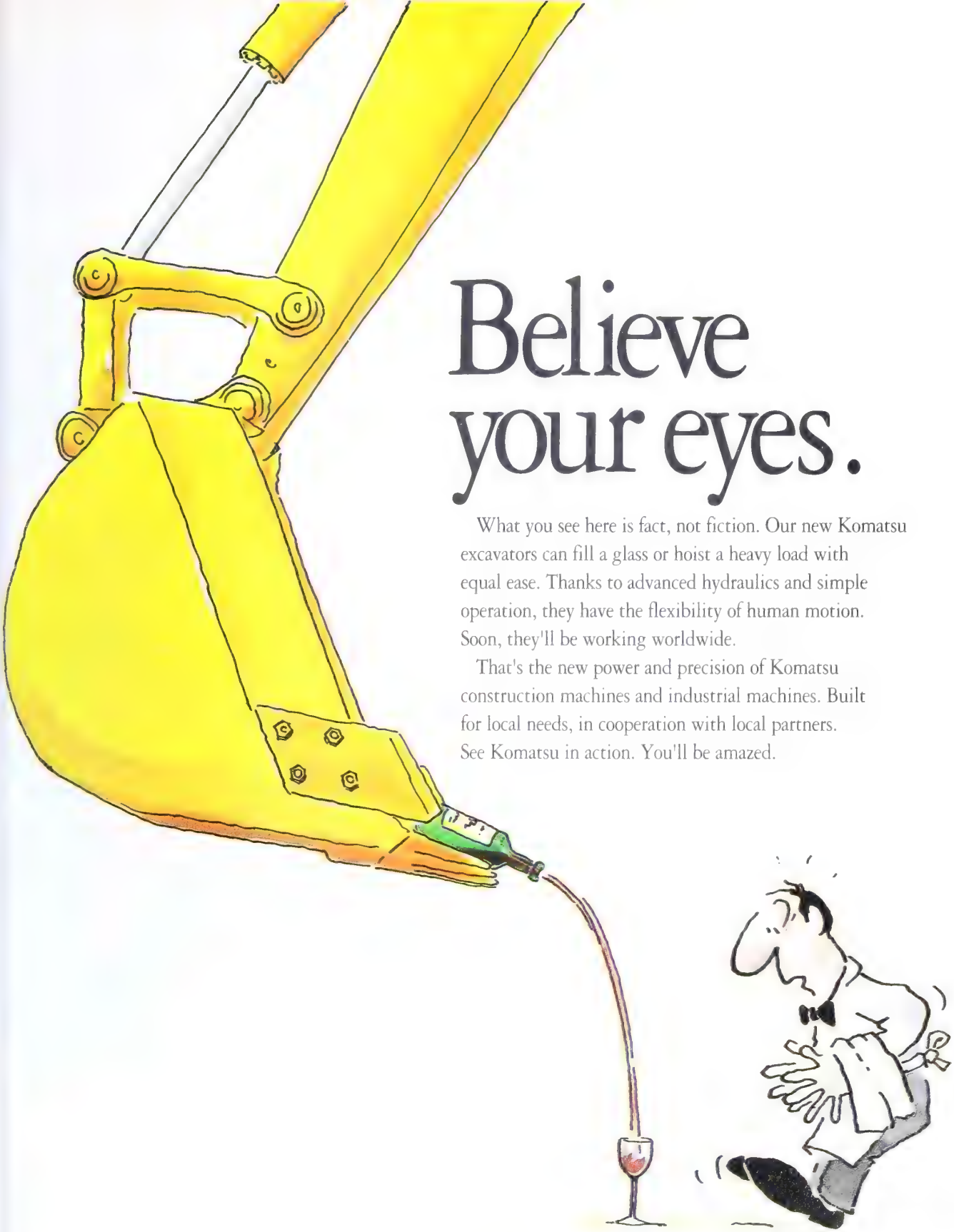
Matsushita also recognizes the value of alliances as a tool to alleviate trade friction. This is especially true where such alliances help boost local production and make use of local management resources. "A good case in point," notes Yamamoto, "is Matsushita Floor Care Company, a joint venture in the U.S. between Matsushita and Whirlpool to produce vacuum cleaners." From Matsushita's perspective, pursuing this business as a joint venture made sense. It built on Matsushita's existing business relationship as a client to Whirlpool. It also took advantage of Japanese and American management techniques, while plugging into Whirlpool's relationships with American home appliance retailers. Equally important it allowed the localization of the operation. Most of the engineers are Americans, while 97%-98% of the components are procured locally.

TADAKAZU YAMAMOTO
Senior Managing Director

AN IMPORT LEADER

Matsushita currently has more than 100 production and R&D bases in 38 countries and is working hard to localize all apsects of these businesses, including procurement of local management.

At the same time the company excels as a major importer to Japan — hitting ¥400 billion in FY 1991-1992. Matsushita has, in fact, been importing since 1938 and has established a network of trading operations around the world — in the U.S., AMAC Corporation — which handle Matsushita's exports and source products for the Japan market.



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KOMATSU USES STRATEGIC ALLIANCES FOR GLOBAL GROWTH AND DIVERSIFICATION

Komatsu was one of the great success stories of the 1980s in terms of global and business diversification. It moved aggressively into new fields, including electronics and equipment for the plastics industry. It also established production bases overseas, often through joint ventures.

In the U.S. Komatsu linked up with Indresco. In Europe it established links with Germany's Hanomag, Italy's FAI and Norway's Moxy Trucks, as well as opening a factory in Britain. Elsewhere it developed production facilities in Brazil, Indonesia and Mexico — all with a goal of achieving a cost-competitive cross-sourcing capability

RISING OVERSEAS PURCHASING

As a result, the role of exports in Komatsu's business has steadily declined, while imports have increased. The company's overseas purchases which hit $150 million in FY 1992, should reach $200 million this year and $300 million by 1995

"Today's yen appreciation situation is similar to what happened in 1985," observes President Tetsuya Katada. "If we were solely dependent on exports we'd be facing serious problems."

KOMATSU'S THREE GS

Komatsu's strategy for the 1990s is what Katada calls the Three Gs — short for Global, Group-wide, Growth. This approach envisages further diversification — to the extent that by the mid-1990s Komatsu hopes to earn half its revenues from non-construction equipment businesses.

"In our approach to globalization," remarks Katada, "we think of diverification. But in diversifying our business, we don't go into areas we know nothing about."

That philosophy is evident in Komatsu's technical alliance with Husky, a $300 million Canadian company with production facilities in Canada, Massachusetts and Germany. Husky is an important producer of machinery for the plastics industry, including robots and product handling equipment, molds, injection molding equipment and hot runner molds. Komatsu took a 26% equity stake in Husky in 1990 with an option to acquire more shares.

STRATEGIC ALLIANCES

Komatsu's emphasis on diversification does not mean, however, that it is not expanding its alliances in the construction equipment industry. Recently, Komatsu established a strategic alliance with Cummins Engine of Indiana to cross source Cummins small diesel engines for the Japanese market and Komatsu's large engines for North America. Ultimately, the deal may lead to joint venture manufacturing in Japan and the U.S.

TETSUYA KATADA
President

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product technology and President supplies local marketing know-how.

"Ideally, an alliance does not mean the addition of resources or capabilities — one plus one — but the multiplication, where one times one is equal to more than one," suggests Toshiba's Kawanishi.

Trust And Independence "An alliance must yield mutual benefit and be based on mutual trust," remarks NEC's Dr. Sekimoto, "otherwise it will not work. He adds that there is a strong personal element to trust.

Fujitsu's Naruto agrees, "There must be mutual respect and the allies must maintain their sense of independence." Toshiba's Kawanishi says, "It is important to work from a basis of trust and respect. It also requires that you clearly define what you are going to do and the conditions that will lead to a separation."

In Toshiba's alliances, an effort is made to lay out in advance a fairly detailed schedule and then revise it regularly. Toshiba's tie-up with Motorola in semiconductor technology, like its joint venture with IBM Japan for LCDs, has quarterly review meetings.

Alliances And Technology Transfer Alliances have long played an important role in the diversification of production and the expansion of product acceptability. Matsushita entrusts manufacture of semiconductor wafers to Signetics, a U.S. subsidiary of Philips. Matsushita has also transferred its no-mercury-added alkaline battery technology to Rayovac Corporation.

Recognizing the growing technological capability of Korea's electronic industry, Hitachi has established an alliance with Goldstar Electron in DRAM semiconductors. Similarly, Toshiba has transferred its proprietary flash memory technology to Samsung Electronics. By giving buyers a second sourcing capability, Toshiba has moved a step closer to translating this promising technology into an industry standard.

Kikkoman's plant in rural Walworth, Wisconsin.

Toshiba's Kawanishi is an adviser to the Singapore government on technology transfer. Toshiba is developing its technology capabilities in Singapore and will use the island republic as a base for designing customized LSIs.

Alliances As A Tool Of Diversification Many companies use strategic alliances to help them diversify their businesses. Komatsu has a link-up with Husky, a Canadian manufacturer of injection molding equipment and robots, as part of the Japanese construction giant's effort to broaden its business base.

Matsushita has joined forces with Japan's Seiyu and L.L. Bean of the U.S. to market L.L. Bean's products in Japan. Toshiba has bought into a Time Warner subsidiary handling film and TV production as well as cable system operations and software. This will help

continued on page 26

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The way the world sees us

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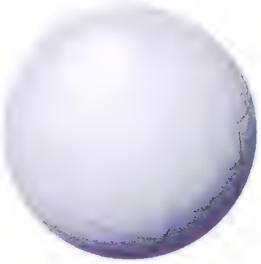

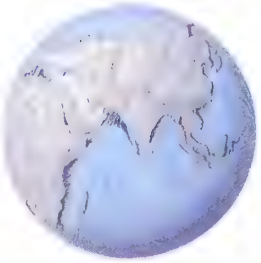

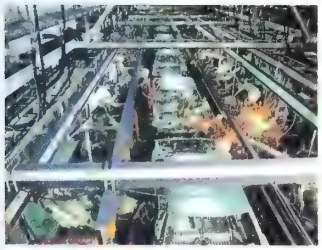

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THE HOTEL OKURA: TOKYO'S INTERNATIONAL HUB

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But the Okura is more than just a great Tokyo hotel. It is a market leader in terms of service and in terms of environmental care. It has introduced recycled paper as well as energy and water conservation programs

There are 17 hotels in the Okura chain, including one in Shanghai which has taken off with China's rapid growth. Recently the Okura upgraded its Los Angeles representative office, creating Hotel Okura USA Inc., in order to provide better customer service

Toshiba enter the visual media and information business.

Mitsubishi Kasei has joined forces with Marion Merrell Dow, Inc. of Kansas City, Missouri, for the North American development and marketing of pharmaceutical products discovered by Mitsubishi Kasei. This alliance gives Marion Merrell Dow a way to put more advanced products through its pipeline of potential new drugs. At the same time, the relationship enables Japan's premier diversified chemical company to expand into the North American pharmaceutical market.

The partners are looking to introduce new products in such key areas as cardiovascular, respiratory and gastrointestinal medicine as well as metabolic disorders and diseases of the central nervous system.

Alliances As Investment Kikkoman's Mogi makes the point that there is another dimension to strategic alliance — namely offshore investment in which the Japanese company effectively teams up with the host government or community.

At a Tokyo reception Toshiba celebrated the start of operations with joint venture partner Time Warner, Inc.

In planning its investments, Kikkoman focuses on the local government's attitude toward the investment, business and the free market. It considers country risk as well as market access, the availability of local raw materials, production facilities and quality labor. It also assesses the local community's receptivity to the investment.

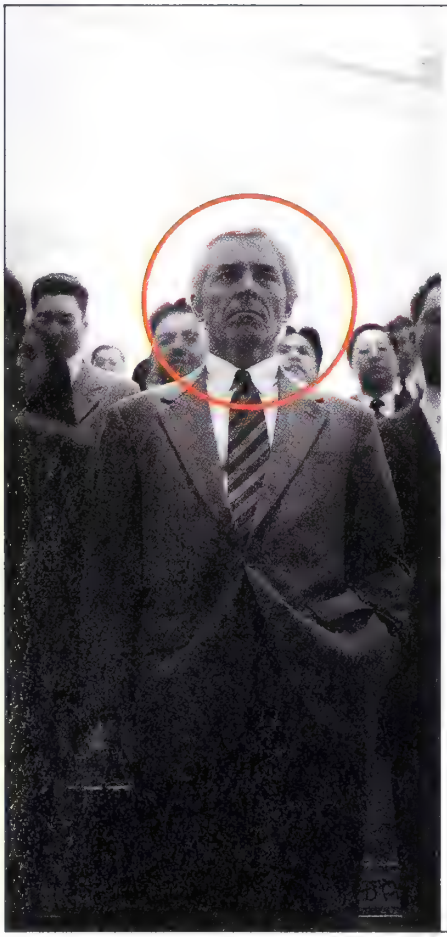
NEC's Dr. Sekimoto points out that in each of the U.S. states where his company has set up operations, the state government has been always supportive.

Alliances To Break Down Trade Barriers Japanese business is also concerned about protectionism around the world. Some countries, of course, require joint ventures — a form of alliance — for market-entry. Thus, Sanyo, for example, is actively establishing such relationships in order to penetrate the China market.According to Sanyo's Dr. Yamano, his company sees China emerging as a major market, given its size, rising earnings levels and the unexploited demand for consumer electronics and home appliances.

Many companies also reason that if they move aggressively to establish a corporate presence on their own, it will generate new tensions. Others believe that collaboration creates a mutual vested interest in keeping trade and investment flowing.

"There are often political barriers to alliances," remarks Toshiba's Kawanishi. "But I believe that technology is always higher

continued on page 28



"When In Rome"

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than any political fence." Or as Mark Berner, an ICL employee sent to work at Fujitsu in Japan, remarks, "Working physically together is the only way we can gain deep understanding of each other."

Scientists from NEC corporation have built a virtual reality ski training system that puts trainees in a simulated ski environment.

Trade Friction Rising

Trade friction between the U.S. and Japan is clearly mounting. This is partly a result of a change of administration. Partly it is a consequence of the collapse of the bubble economy. Kikkoman's Mogi notes that hard times have led to a downturn in consumer spending spread unevenly across the Japanese economy. Mogi believes that one priority for Japan in alleviating its trade imbalance is to stimulate consumer demand.

Right now, NEC's Dr. Sekimoto suggests, many so-called trade issues have more to do with the perceptions of politicians and journalists than businessmen. "We personally do not feel any tension between the U.S. and Japan," he remarks, citing the most common example of trade friction.

Dr. Sekimoto observes that the debate over the value of the yen to the dollar is a good example of how a few theorists can get carried away. Dramatic changes in exchange rates have occurred, without any real impact on the trade balance.

The reason, according to Dr. Sekimoto, is that the U.S. and Japanese economies — and societies — are now complementary. They tend not to be directly competitive because the U.S. has entered the information age. He cites the example of VCRs — Japanese hardware which helped spawn a multi-billion dollar U.S. software industry. "This is a contribution from Japan to the U.S.," he suggests. "In reality, the U.S. and Japan mutually contribute to each other."

Viewed in worldwide terms, Dr. Sekimoto sees his concept of "mesh globalization" — where NEC's subsidiaries around the world do business with each other often without reference to Tokyo headquarters — as the path ahead for other Japanese companies and, indeed, other major international firms.

Looking ahead into the early 21st century, when there will be a genuinely borderless global economy, he argues that the role and extent of strategic alliances will broaden considerably.

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273	**Sato Kogyo**	965	2309	9	6	−11	3.8	52	0.8	5423	44	8210	7.4	3
274	**Mitsubishi Warehouse & Transportation**	969	2301	14	62	36	3.1	31	0.5	1391	75	2354	9.9	5
275	**Kawasaki Kisen**	975	2274	4	26	6	4.4	56	0.0	4770	41	4842	7.9	5
276	**Kaneka**	976	2273	6	40	17	1.8	26	1.0	2576	87	2912	6.9	2
277	**House Food Industrial**	977	2271	22	24	4	2.4	28	0.8	1718	80	1753	8.5	4
278	**Sagami Railway**	986	2260	6	61	35	3.8	177	0.8	1559	13	3878a	2.2	5
279	**Yokogawa Electric**	992	2249	9	36	14	1.4	31	0.8	2483	73	3678	4.4	3
280	**Teikoku Oil**	993	2246	8	47	23	2.5	77	0.6	473	29	1212a	3.2	1
281	**Nichirei**	995	2241	7	51	26	2.9	106	0.8	4835	21	3195	2.8	4
	MALAYSIA													
	COUNTRY COMPOSITE		**38908**	**4.6**	**44**	**46**	**4.6**	**26**	**1.2**	**7460**	**1448**	**23596**	**17.7**	
1	**Telekom Malaysia**	155	11607	6	12	15	4.1	32	1.0	1335	361	4098	12.7	5
2	**Tenaga Nasional**	168	10912	4	7	9	2.7	24	0.5	1675	448	NA	11.0	1
3	**Resorts World**	546	4237	4	65	68	8.8	28	1.0	527	151	NA	31.2	5
4	**Genting**	651	3505	8	58	61	4.5	24	0.8	641	147	1108a	19.0	5
5	**Malayan Banking**	658	3470	5	42	44	2.7	29	1.2	NA	102	15824a	9.4	6
6	**Sime Darby**	794	2890	2	20	22	2.5	20	2.6	2424	138	2536	12.5	7
7	**Proton**	973	2288	5	102	105	6.6	24	1.4	857	101	NA	27.9	4
	NETHERLANDS													
	COUNTRY COMPOSITE		**123168**	**60**	**10**	**9**	**6.1**	**15**	**3.3**	**212950**	**11641**	**670490**	**36.1**	
1	**Royal Dutch Petroleum** (1)	NR	50274	94	8	6	1.6	15	5.0	85923	4784	103559	10.7	1
2	**Unilever NV** (2)	NR	17483	109	7	5	4.9	14	3.0	42896	2234	24800	35.6	4
3	**Internationale Nederlanden Groep**	206	9607	37	36	34	1.1	10	4.8	11227	939	181367	10.7	6
4	**ABN AMRO Holding**	257	8102	29	19	17	1.0	10	5.6	NA	847	257871	10.6	6
5	**Philips Electronics**	472	4819	15	−28	−29	0.7	36	0.0	32788	168	27365	2.0	4
6	**Elsevier** (5)	NR	4693	72	15	14	8.7	19	2.0	3843	451	6006	46.1	5
7	**Aegon**	505	4598	46	37	35	1.3	9	4.5	4927	509	46975	15.2	6
8	**Polygram**	529	4400	26	−12	−13	8.8	16	1.4	3707	283	2968	56.4	4
9	**Heineken**	565	4084	102	10	8	2.2	16	1.9	4376	259	4389	13.7	4
10	**Akzo**	621	3704	80	−9	−10	1.3	10	4.5	9440	399	7631	12.5	2
11	**Wolters Kluwer**	779	2954	49	20	19	8.2	21	1.5	1319	141	1180	39.0	5
12	**Dordtsche Petroleum**	790	2904	87	9	7	41.7	19	5.4	NA	157	70	224.9	1
13	**Ahold**	797	2866	51	7	5	2.6	15	2.2	12503	171	3548	17.2	5
14	**AMEV** (4)	NR	2680	39	27	26	1.0	9	4.6	NA	298	2762a	11.4	6
	NEW ZEALAND													
	COUNTRY COMPOSITE		**6312**	**2**	**27**	**25**	**2.0**	**44**	**4.0**	**2674**	**164**	**6322**	**5.1**	
1	**Telecom Corp. of New Zealand**	606	3786	2	45	44	2.6	65	5.2	1340b	58b	2625	4.0	5
2	**Carter Holt Harvey**	895	2526	2	8	7	1.4	22	2.7	1335	105	3697	6.2	7
	NORWAY													
	COUNTRY COMPOSITE		**5499**	**27**	**−5**	**2**	**2.3**	**223**	**1.7**	**8588**	**25**	**11421**	**1.0**	
1	**Norsk Hydro**	407	5499	27	−5	2	2.3	223	1.7	8588	25	11421	1.0	1
	SINGAPORE													
	COUNTRY COMPOSITE		**18485**	**5**	**9**	**7**	**1.7**	**18**	**1.4**	**4488**	**1208**	**91643**	**10.2**	
1	**Singapore Airlines**	402	5590	4	12	10	1.3	11	2.3	3517b	530b	6211	12.1	5
2	**OCBC Overseas Chinese Bank**	559	4136	6	18	16	2.0	22	1.2	NA	184	25616	9.1	6
3	**Development Bank of Singapore**	596	3836	7	3	2	1.6	19	1.0	NA	204	39184	8.3	6
4	**United Overseas Bank**	854	2686	5	15	14	1.8	14	1.7	NA	187	15704a	12.6	6
5	**Keppel**	999	2236	5	−3	−5	2.0	21	1.0	971	103	4927	9.1	3
	SOUTH AFRICA													
	COUNTRY COMPOSITE		**19866**	**16**	**−16**	**−2**	**2.1**	**12**	**4.3**	**586**	**1786**	**11956**	**15.7**	
1	**Anglo American**	309	6975	30	−15	−1	1.7	14	3.6	NA	529	7199	12.0	8
2	**De Beers Centenary**	330	6667	18	−34	−22	NA	10	4.3	NA*	686	NA	NA	2
3	**Gencor**	656	3481	3	−32	−20	1.0	9	5.6	NA	397	3869	11.8	8
4	**Driefontein Consolidated**	835	2743	13	17	37	3.6	16	3.8	586	174	888	23.2	8
	SPAIN													
	COUNTRY COMPOSITE		**61438**	**34**	**−14**	**9**	**1.8**	**12**	**4.1**	**40326**	**5284**	**391190**	**15.4**	
1	**Telefónica Nacional de España**	188	10238	11	−5	19	1.0	16	4.4	9606	642	31839	6.0	5
2	**Endesa**	231	9008	35	−6	18	1.9	10	3.0	5566	845	13333	18.7	1
3	**Repsol**	277	7604	25	−16	5	2.1	13	3.3	15160	571	10696	15.9	1
4	**Banco Bilbao Vizcaya**	382	5837	25	−16	6	1.4	10	5.3	NA	580	70783a	13.7	6
5	**Iberdrola**	428	5222	6	−22	−3	0.8	10	8.2	6149	489	24092a	7.4	1
6	**Banco de Santander**	442	5100	46	−6	18	2.1	9	4.5	NA	526	46293a	21.9	6
7	**Banco Central**	482	4773	28	−22	−2	1.0	11	6.1	NA	418	73619a	8.9	6
8	**Corporación Bancaria de España**	492	4712	38	NA	NA	1.2	10	NA	NA	446	67573	12.2	6
9	**BEX (Banco Exterior Internacional)**	685	3357	32	−7	17	1.7	13	4.4	NA	260	31506a	13.7	6
10	**Banco Popular Español**	690	3330	115	1	27	2.3	8	4.9	NA	399	19857a	28.2	6
11	**Pryca**	989	2256	12	−37	−21	4.8	21	1.3	3845	108	1598a	22.9	5

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RY	GLOBAL 1000 RANK	MARKET VALUE U S $ MIL	PRICE PER SHARE U.S. $	% CHANGE FROM 1992 (U S $)	(LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U S $ MIL.	PROFITS U.S. $ MIL.	ASSETS U S $ MIL.	RETURN ON EQUITY %	INDUSTRY CODE
VEDEN													
NTRY COMPOSITE		**52254**	**51**	**-1**	**23**	**2.7**	**36**	**1.9**	**52014**	**835**	**66982**	**8.0**	
Astra	137	12835	106	8	34	8.4	26	0.7	2164	490	2783	31.9	45
L. M. Ericsson	217	9283	45	76	119	4.0	140	1.1	6535	67	7800	2.9	34
Procordia	368	5977	24	NA	NA	2.2	13	2.1	5572	225	5469	17.4	71
ASEA (3)	NR	5714	63	-6	17	3.5	19	2.0	NA	297a	1833a	18.1	34
Volvo	533	4365	56	-21	-1	1.1	-9	1.9	11536	-462	16263	-11.4	42
Sandvik	635	3573	66	-5	18	2.0	22	2.0	2393	160	3352	8.8	25
Svenska Cellulosa Aktiebolaget	767	2988	17	-13	8	1.2	63	2.6	4467	47	6407	1.9	23
Stora Kopparbergs Bergslags	819	2806	47	-11	10	0.9	-18	1.9	6518	-155	10264	-5.2	23
AGA	923	2454	52	0	24	2.5	18	2.4	1650	140	2856	14.1	22
Electrolux	987	2260	31	-34	-18	1.0	89	2.8	11179	25	9954	1.1	41
ITZERLAND													
NTRY COMPOSITE		**154103**	**1113**	**27**	**23**	**2.1**	**19**	**2.0**	**138617**	**8937**	**717943**	**11.1**	
Roche Holding	24	31457	3315	43	40	2.5	21	0.8	9094	1347	19375	12.2	45
Nestle	28	29302	1594	21	18	3.2	16	2.1	38272	1896	31229	20.7	44
Union Bank of Switzerland	89	16629	702	34	31	1.3	17	2.9	NA	941	187360	7.3	61
Sandoz	93	16344	2226	14	11	2.6	15	1.5	10126	1049	12647	16.8	45
Ciba-Geigy	133	13060	442	-7	-9	1.0	12	2.2	15449	1067	21489	8.6	22
CS Holding	187	10276	1840	39	36	1.5	14	2.9	NA	722	154846a	10.3	61
Swiss Bank Corp.	221	9193	260	41	37	1.1	13	3.8	NA	706	141081	8.6	61
Zurich Vers.	304	7073	779	18	15	1.3	21	1.6	12584a	303a	46973a	6.4	63
Schweiz. Rück.	443	5089	428	25	22	2.2	26	1.5	12254a	186a	33371a	8.4	63
BBC Brown Boveri (3)	NR	5007	588	-1	-3	2.4	21	2.2	28912	244	26945	11.9	34
SMH	503	4611	1394	95	90	5.4	26	0.9	1664a	177a	1525a	20.8	46
Winterthur	667	3433	419	-3	-5	1.1	19	2.3	10260a	176a	34080a	5.9	63
Holderbank	875	2630	478	27	24	1.2	20	1.8	NA	122a	7022a	6.2	21
ITED STATES													
NTRY COMPOSITE		**3204803**	**86**	**22**	**22**	**3.4**	**20**	**2.5**	**2913866**	**148506**	**6861182**	**14.9**	
American Telephone & Telegraph	2	82400	62	45	45	4.4	21	2.1	64900	3850	57190	21.0	55
Exxon	4	81351	66	8	8	2.4	18	4.4	117000	4800	85030	13.6	11
General Electric	5	79341	93	21	21	3.4	18	2.7	57073	4305	192876	18.9	34
Wal-Mart Stores	8	64065	28	5	5	9.2	31	0.5	55483b	1995b	20565	29.6	54
Coca-Cola	14	54231	42	-6	-6	13.9	27	1.6	13074	1905	11052	50.7	43
Philip Morris	17	44973	50	-35	-35	3.6	9	5.2	59100	4940	50010	40.0	43
Merck	18	43785	38	-24	-24	8.8	18	2.6	9663	2447	11086	49.7	45
DuPont	21	35408	53	0	0	3.1	24	3.3	37799	2688	38870	12.9	22
Procter & Gamble	22	33376	49	-4	-4	4.7	19	2.2	29362	1872	24025	25.0	44
GTE	23	32982	35	12	12	3.3	18	5.2	19984	1787	42140	18.9	55
Bristol-Myers Squibb	25	31079	60	-17	-17	5.2	14	4.8	11155	2208	10804	37.1	45
International Business Machines	27	30143	53	-42	-42	1.1	-4	4.1	64523	-6865	86700	-28.2	33
Johnson & Johnson	29	29247	45	-8	-8	5.7	17	2.3	13753	1625	11884	32.6	45
PepsiCo	30	28964	36	-1	-1	5.4	22	1.8	21970	1302	20951	24.5	43
Chevron	32	28656	88	23	23	2.1	12	4.0	42900	2210	33970	16.7	11
General Motors	33	28368	40	1	1	4.7	-10	2.0	113000	-2620	191020	-46.0	42
Mobil	34	27817	70	7	7	1.6	17	4.6	64076	1308	40561	9.2	11
Amoco	35	27793	56	14	14	2.1	29	3.9	28200	850	28460	7.3	11
American International Group (7)	36	27202	129	52	52	2.0	16	0.4	19441	1625	79835	12.7	63
Microsoft	42	25955	93	15	15	11.5	31	0.0	2759	708	2640	37.1	52
BellSouth	45	25616	52	9	9	1.9	16	5.3	15200	1660	31460	11.7	55
Ford Motor	46	25454	52	17	17	1.7	67	3.1	100000	-80	180600	2.6	42
Minnesota Mining & Mfg.	48	24723	113	18	18	3.7	20	2.9	13883	1236	11955	19.1	71
Bell Atlantic	51	23273	54	26	26	2.7	17	4.9	12600	1380	27880a	16.5	55
Intel	52	23205	111	122	122	4.3	17	0.4	5844	1067	8089	25.3	35
Abbott Laboratories	53	23203	27	-19	-19	6.8	18	2.5	7852	1239	6941	38.3	45
Pfizer	54	23187	72	-4	-4	4.9	21	2.3	7230	1094	9590	23.3	45
Walt Disney	55	23074	44	16	16	4.9	26	0.6	7504	817	10862	18.6	53
Southwestern Bell	56	23015	38	27	27	2.5	17	3.9	10015	1302	23810	14.4	55
Motorola	60	21416	81	103	103	4.3	33	0.5	13303	576	10629	12.7	35
Hewlett-Packard	62	20973	83	10	10	2.9	24	1.2	16410	881	11973a	11.9	35
American Home Products	63	20819	67	-11	-11	5.9	18	4.3	7874	1151	7141	32.2	45
Fannie Mae	64	20748	76	19	19	3.1	12	2.4	NA	1649	181000	25.7	62
Home Depot	66	20516	46	31	31	8.9	53	0.2	7148b	363b	3932b	17.0	54
Atlantic Richfield	68	19766	124	9	9	2.9	16	4.4	18668	1193	24260	18.6	11
Ameritech	72	19520	72	16	16	3.2	14	5.1	11150	1346	22820	21.9	55
Pacific Telesis	73	19293	48	17	17	2.3	22	4.6	9935	1142	22520	10.5	55
Sears, Roebuck	76	18819	54	25	25	2.0	-8	2.9	52345	-2567	83530	-24.5	54
McDonald's	80	17845	50	6	6	3.9	19	0.8	7133	959	11349a	21.0	53
US West	81	17822	43	24	24	2.2	15	5.0	10281	1179	27960	14.3	55
Berkshire Hathaway (7)	83	17295	15000	65	65	1.9	39	0.0	3029	407	16945	4.8	71
Nynex	84	17221	83	10	10	1.8	13	5.7	13155	1311	27714	13.7	55
WMX Technologies	86	16968	34	-4	-4	4.1	18	1.7	8661	921	12572a	22.5	52
Eastman Kodak	87	16815	52	30	30	2.8	17	3.9	20577	994	24170a	16.3	46

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THE GLOBAL 1000

COUNTRY RANK		GLOBAL 1000 RANK	MARKET VALUE U S $ MIL	PRICE PER SHARE U S $	% CHANGE FROM 1992 (U.S. $)	% CHANGE FROM 1992 (LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U S $ MIL.	PROFITS U S $ MIL.	ASSETS U.S. $ MIL.	RETURN ON EQUITY %
45	**Texaco**	90	16511	64	0	0	1.8	17	5.0	37663	1012	25990	10.6
46	**Schlumberger**	96	15791	65	−1	−1	3.7	25	1.8	6332	662	7007	15.2
47	**Chrysler**	102	15438	44	145	145	1.7	10	1.4	36900	723	40650	18.1
48	**Dow Chemical**	103	15401	57	−7	−7	1.9	31	4.6	18971	276	25360	6.1
49	**BankAmerica**	104	15195	45	−2	−2	1.5	11	8.1	NA	1492	115500a	13.7
50	**Eli Lilly**	108	14927	51	−23	−23	3.1	20	4.7	6167	828	8673	15.4
51	**Pacific Gas & Electric**	110	14678	34	7	7	1.8	14	5.5	10296	1171	24190	13.0
52	**Banc One**	111	14623	54	13	13	2.5	15	2.6	NA	781	61420	17.2
53	**Anheuser-Busch**	113	14512	52	−3	−3	3.1	15	2.5	11394	994	10538	20.7
54	**American Express**	120	13799	29	26	26	1.9	36	3.5	NA	436	175800	5.3
55	**MCI Communications**	122	13642	52	62	62	4.3	22	0.2	10562	609	9678	19.4
56	**Emerson Electric**	123	13543	60	19	19	3.6	20	2.4	7706	663	6627	18.3
57	**Time Warner**	125	13485	36	37	37	1.7	−26	0.9	13070	86	27370	−6.4
58	**Boeing**	126	13450	40	−10	−10	1.7	9	2.5	30184	1554	18147	18.1
59	**Schering-Plough**	131	13243	66	28	28	8.3	18	2.7	4056	720	4157	47.1
60	**J.P. Morgan**	134	12910	67	17	17	2.0	9	3.6	NA	1382	102900	22.6
61	**Southern**	138	12823	41	20	20	1.8	14	5.6	8073	839	20040	13.0
62	**Kellogg**	139	12815	54	−8	−8	6.6	19	2.4	6191	683	4015	35.4
63	**Union Pacific**	143	12591	62	16	16	2.7	17	2.4	7294	728	14100	16.1
64	**Sara Lee**	146	12533	26	2	2	3.7	19	2.2	13243	761	9989	19.3
65	**NationsBank**	152	11923	47	1	1	1.5	11	3.4	NA	1145	118100	14.5
66	**Toys 'R' Us**	158	11503	39	23	23	4.0	27	0.0	7169b	438b	5323b	14.9
67	**Gillette**	160	11343	52	4	4	10.7	22	1.6	5163	513	3887a	49.4
68	**J. C. Penney**	163	11169	48	46	46	2.5	16	3.0	18009b	777b	13563b	16.1
69	**Sprint**	164	11138	33	43	43	2.8	29	3.0	10420	496	13600	9.4
70	**General Mills**	171	10799	65	3	3	7.9	20	2.6	7778	506	4305	39.9
71	**SCEcorp**	173	10780	48	11	11	1.8	15	5.8	7969	739	19140	12.3
72	**Dun & Bradstreet**	182	10472	59	9	9	4.9	19	4.2	4751	553	4915	26.0
73	**Texas Utilities**	191	10187	47	20	20	1.5	15	6.6	4957	619	19430	10.5
74	**Campbell Soup**	194	10015	40	16	16	4.9	18	2.5	6263	491	4354	27.6
75	**ITT**	195	9986	84	33	33	1.5	−39	2.4	21651	−260	58764	−3.9
76	**Citicorp**	198	9868	29	53	53	1.0	17	0.0	NA	722	217000a	6.2
77	**Warner-Lambert**	199	9859	73	16	16	8.4	15	3.1	5588	644	3602a	56.4
78	**Tele-Communications**	202	9794	23	23	23	6.6	NM	0.0	3574	−19	13164	−2.3
79	**H. J. Heinz**	203	9781	39	2	2	4.0	17	3.1	6582	638	5931	24.3
80	**General Re**	205	9624	114	39	39	2.3	16	1.7	2349	596	13280	14.1
81	**Chemical Banking**	212	9471	38	5	5	1.2	9	3.4	NA	1086	139700	12.7
82	**AlliedSignal**	213	9471	67	15	15	4.2	17	1.7	12042	535	10756	25.1
83	**Weyerhaeuser**	218	9244	45	33	33	2.5	22	2.7	9219	372	18158	11.5
84	**Kmart**	223	9155	23	−6	−6	1.4	12	4.3	37724b	941b	18931b	12.2
85	**Colgate-Palmolive**	224	9150	59	10	10	4.3	19	2.1	7007	477	5434	22.1
86	**May Department Stores**	226	9105	74	34	34	2.9	15	2.5	11150b	603b	8545b	18.9
87	**Fannie Mae** (7)	230	9017	50	24	24	2.5	14	1.8	4461	622	59502	18.2
88	**Capital Cities/ABC**	236	8786	528	14	14	2.4	21	0.0	5344	389	6696a	11.5
89	**Norfolk Southern**	240	8700	62	−4	−4	2.1	16	2.9	4607	558	10401	13.1
90	**Limited**	242	8689	24	14	14	4.6	20	1.5	6944b	455b	3419	23.7
91	**Novell**	244	8493	28	5	5	9.1	32	0.0	933	249	1097	28.2
92	**Baxter International**	249	8310	30	−15	−15	2.2	15	3.4	8471	561	9155	15.1
93	**Archer Daniels Midland**	252	8184	24	−3	−3	1.7	14	0.4	9232	504	7524	12.3
94	**Tenneco**	256	8108	48	20	20	5.3	28	3.3	13139	233	16580	19.1
95	**Public Service Enterprise Group**	260	8063	34	21	21	1.7	15	6.4	5357	504	14877	11.2
96	**Phillips Petroleum**	261	8035	31	20	20	3.0	20	3.6	11933	270	11468	15.1
97	**McCaw Cellular Communications**	262	8003	43	58	58	5.7	−28	0.0	1743	−365	8916	−20.6
98	**Duke Power**	263	7990	39	16	16	2.0	16	4.6	3961	508	10802	12.0
99	**Consolidated Edison Co. of New York**	264	7983	34	20	20	1.6	13	5.7	5933	604	11596	12.4
100	**International Paper**	265	7937	67	−5	−5	1.3	81	2.5	13600	142	14941a	1.6
101	**Primerica**	266	7881	46	81	81	2.3	13	1.4	NA	593	21560a	17.6
102	**Merrill Lynch**	271	7781	76	56	56	1.7	8	1.8	NA	952	107020	20.9
103	**Electronic Data Systems**	272	7719	32	5	5	NA	23	1.3	8219	636	5703a	NA
104	**PPG Industries**	273	7708	73	8	8	2.9	22	2.8	5814	319	5662	13.0
105	**Chubb**	276	7636	87	30	30	1.9	13	2.0	3853	617	15020	15.4
106	**Unocal**	280	7521	31	16	16	2.9	25	2.2	10061	196	9452	11.3
107	**Kimberly-Clark**	281	7518	47	−19	−19	3.4	15	3.7	7091	517	6029	23.3
108	**Gannett**	284	7509	52	9	9	4.6	21	2.5	3469	346	3609	22.1
109	**Raytheon**	286	7463	55	23	23	2.2	11	2.6	9058	635	6015	19.3
110	**PNC Bank**	287	7460	32	25	25	2.0	13	3.6	NA	529	51380	15.9
111	**First Union** (7)	288	7395	45	14	14	1.6	11	3.1	4355	515	51327	14.7
112	**CSX**	289	7347	71	7	7	2.5	16	2.1	8734	470	13050	15.5
113	**Caterpillar**	293	7231	72	19	19	4.6	NM	0.8	10194	218	13935	−1.7
114	**Xerox**	296	7201	76	1	1	1.9	14	4.0	18261	562	34060	13.4
115	**Rhone-Poulenc Rorer**	299	7165	52	−13	13	5.7	16	1.9	4096	423	3858	34.6
116	**Norwest**	300	7163	50	33	33	2.5	15	2.7	NA	447	44557	16.5
117	**Dominion Resources**	306	7025	43	16	16	1.7	15	5.7	3791	429	12615	11.1
118	**Monsanto**	310	6957	58	−12	−12	2.3	21	4.0	7763	452	9085	11.3
119	**Albertson's**	311	6948	55	41	41	5.2	26	1.3	10174b	276b	2945b	19.9
120	**FPL Group**	317	6855	38	8	8	1.8	14	6.6	5193	467	12306	12.9

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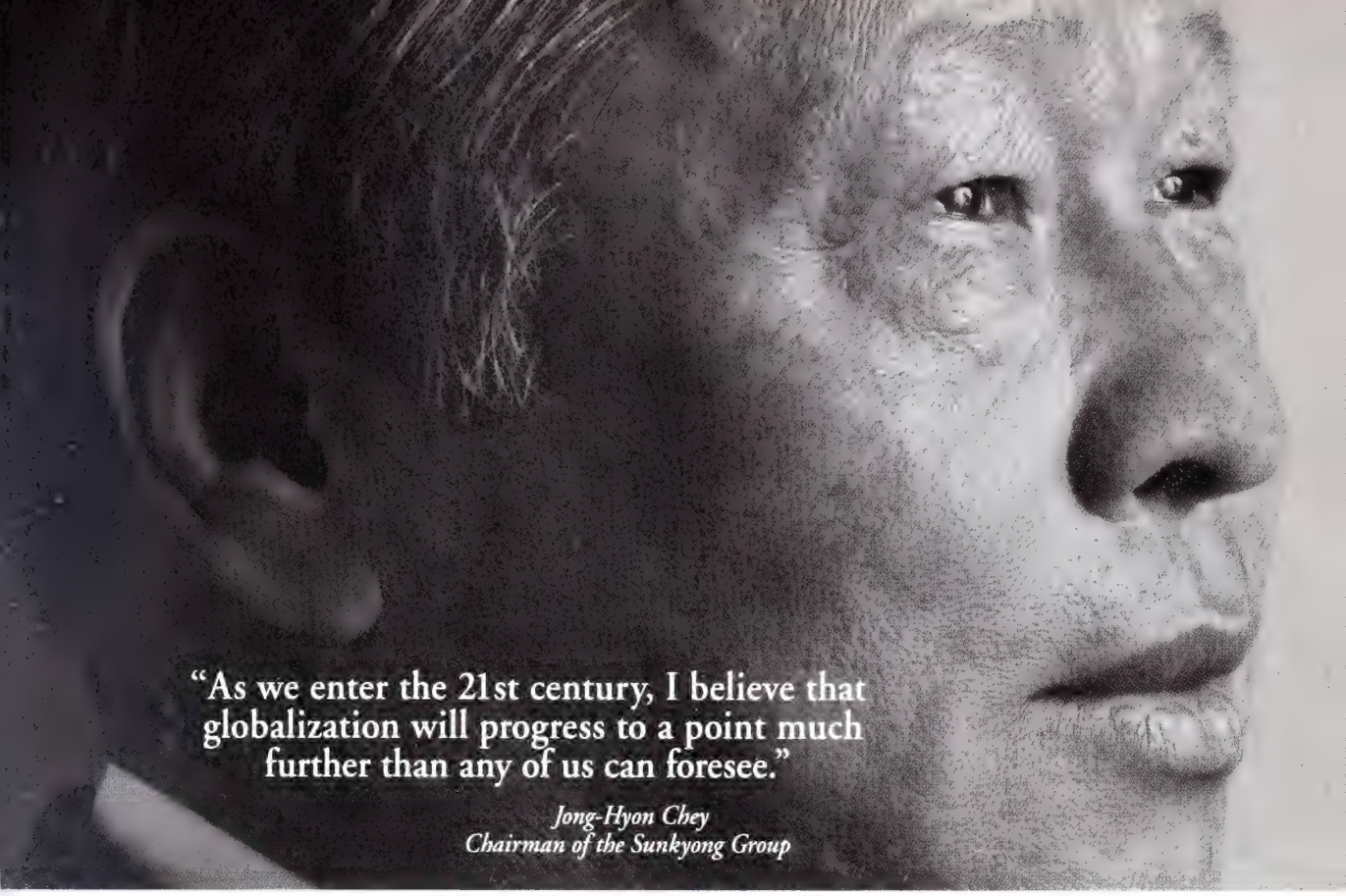

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THE GLOBAL 1000

COUNTRY RANK	GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL	PRICE PER SHARE U.S. $	% CHANGE FROM 1992 (U.S. $)	% CHANGE FROM 1992 (LOCAL)	PRICE/BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL	PROFITS U.S. $ MIL	ASSETS U.S. $ MIL	RETURN ON EQUITY %	IND C
121 **Rockwell International**	318	6802	31	31	31	2.5	13	3.2	10910	483	9731	18.9	3
122 **Automatic Data Processing**	319	6797	49	7	7	5.2	24	0.9	1941	256	2169	21.8	5
123 **Enron**	321	6760	57	37	37	3.4	19	2.5	6325	336	10664	17.7	1
124 **American General**	323	6748	31	32	32	1.4	12	3.5	4602	533	39740	11.7	6
125 **American Brands**	324	6736	33	-31	-31	1.6	8	5.9	14624	884	14963	20.5	4
126 **Apple Computer**	327	6709	57	-5	-5	3.1	14	0.8	7087	530	4224	22.4	3
127 **Pitney Bowes**	329	6679	43	34	34	4.0	21	2.1	3434	312	6499	19.6	5
128 **Cisco Systems** (7)	332	6613	54	136	136	19.2	48	0.0	340	84	324	40.4	5
129 **Occidental Petroleum**	333	6612	22	-1	-1	1.9	-18	4.6	8494	-496	17877	-11.0	1
130 **Marsh & McLennan**	334	6586	90	16	16	6.0	21	3.0	NA	304	3088	28.4	6
131 **Burlington Resources**	335	6572	50	40	40	2.7	32	1.1	1141	190	4470	8.4	1
132 **United Technologies**	338	6551	53	1	1	1.9	53	3.4	22032	195	15928	3.6	5
133 **Philadelphia Electric**	339	6548	30	17	17	1.7	13	4.7	3962	479	12560a	12.7	7
134 **CPC International**	341	6496	43	1	1	4.4	15	3.0	6599	431	5172	28.7	4
135 **AMP**	343	6425	61	-1	-1	3.3	22	2.6	3337	290	3005	15.0	3
136 **Corning**	344	6423	33	-11	-11	3.6	25	2.1	3709	266	4286	14.2	4
137 **RJR Nabisco Holdings**	345	6384	6	-45	-45	0.8	9	0.0	15700	780	32040	8.5	4
138 **American Electric Power**	346	6366	35	9	9	1.5	14	7.0	5045	468	14220	11.1	1
139 **UST**	348	6363	30	0	0	12.2	20	3.2	1044	313	674	60.0	4
140 **Paramount Communications**	351	6313	54	15	15	1.6	25	1.5	4265	270	7054	6.1	7
141 **Wachovia**	358	6173	36	13	13	2.2	14	3.0	NA	433	33360	15.8	6
142 **Loews**	360	6110	94	-18	-18	1.1	7	1.1	13692	949	40492	16.0	7
143 **Entergy**	362	6063	35	26	26	1.5	14	4.6	4116	438	14380a	10.7	1
144 **Oracle Systems**	369	5966	42	181	181	13.4	60	0.0	1178	61	956	22.5	5
145 **Goodyear Tire & Rubber**	370	5963	40	12	12	3.0	15	1.5	11785	367	8564	20.1	3
146 **Bankers Trust New York**	371	5936	72	23	23	1.8	7	4.4	NA	761	72450	24.4	6
147 **Central & South West**	372	5934	32	14	14	2.0	16	5.1	3311	382	9829	12.9	1
148 **Commonwealth Edison**	377	5893	28	-17	-17	1.0	13	5.8	6026	514	18020	7.8	1
149 **Aetna Life & Casualty**	378	5886	53	27	27	0.8	NM	5.2	10794	-5	89930	-0.3	6
150 **Viacom** (7)	381	5844	49	35	35	7.0	46	0.0	1865	66	4317	15.1	5
151 **Wells Fargo**	383	5830	106	32	32	2.0	26	1.9	NA	283	52540	7.5	6
152 **ConAgra**	384	5828	25	-3	-3	2.6	16	2.5	21219	372	9759	16.8	4
153 **Aluminum Co. of America**	386	5787	68	-13	-13	1.6	NM	2.4	9588	22	11023	-0.2	2
154 **Georgia-Pacific**	389	5749	65	0	0	2.3	NM	2.5	11847	-60	10890	-0.6	2
155 **Houston Industries**	390	5734	44	3	3	1.7	17	6.8	4596	341	12029a	9.9	1
156 **Dean Witter, Discover** (7)	393	5695	34	NA	NA	2.1	13	1.2	5184	439	23822	16.4	6
157 **Cooper Industries**	394	5684	50	0	0	2.0	19	2.6	5578	361	7576	10.8	3
158 **CNA Financial**	399	5639	91	9	9	1.2	-12	0.0	10793	-662	36680	-10.0	6
159 **Digital Equipment**	400	5624	44	5	5	1.1	-2	0.0	13931	2310	11284	-45.8	3
160 **SunTrust Banks**	409	5479	44	12	12	2.0	13	2.6	NA	413	36650	15.7	6
161 **Nike**	410	5474	73	25	25	4.1	16	1.1	3405	329	1873	26.4	4
162 **Texas Instruments**	416	5375	65	72	72	3.1	21	1.1	7440	247	5185	14.5	3
163 **USX-Marathon Group**	417	5374	19	-21	-21	1.7	48	3.6	12782	109	11141	3.4	1
164 **U. S. Healthcare**	420	5355	50	41	41	15.2	25	1.0	2189	200	758a	61.3	5
165 **Quaker Oats**	422	5318	74	31	31	6.4	18	2.6	5576	248	3040	35.7	4
166 **Westinghouse Electric**	424	5283	15	-10	-10	2.3	17	2.6	8447	348	10400	13.2	3
167 **Walgreen**	426	5261	43	29	29	4.3	23	1.4	7475	221	2374	18.7	5
168 **AMR**	427	5239	71	12	12	1.2	10	0.0	14396	-475	16208a	-11.3	5
169 **Honeywell**	432	5181	38	4	4	2.9	15	2.3	6223	400	4870	18.9	3
170 **Great Lakes Chemical** (7)	433	5180	73	9	9	4.7	21	0.5	1496	233	1732	22.1	1
171 **Upjohn**	434	5172	30	-15	-15	3.0	9	5.0	3669	547	4604	31.8	4
172 **Dayton Hudson**	435	5165	73	7	7	2.3	15	2.2	17927b	383b	9485	15.9	5
173 **Rubbermaid**	444	5088	32	3	3	5.2	27	1.2	1805	167	1327	19.3	4
174 **Reader's Digest Association** (7)	445	5073	43	-9	-9	5.6	20	2.8	2614	234	1932	28.5	5
175 **Detroit Edison**	446	5071	35	5	5	2.0	9	6.0	3558	588	10464a	20.7	1
176 **Gap**	449	5028	35	2	2	7.3	24	1.1	2960b	211b	1379b	30.3	5
177 **Carolina Power & Light**	451	5023	31	19	19	2.0	13	5.2	2767	380	7707	14.9	1
178 **LIN Broadcasting**	452	5014	98	46	46	NM	-64	0.0	573	-95	2863	19.4	5
179 **Computer Associates International**	453	5010	28	95	95	4.7	20	0.4	1841b	246b	2169	24.0	4
180 **Ralston-Purina**	454	5000	45	-2	-2	6.4	15	2.8	7752	292	4632a	41.7	4
181 **Freeport-McMoRan Copper & Gold** (7)	455	4993	25	20	20	11.8	44	2.4	714	130	1694	27.0	3
182 **Sysco**	456	4990	27	6	6	4.7	27	1.1	8893	172	2301	17.6	4
183 **Morgan Stanley Group**	458	4976	66	28	28	2.5	10	1.6	NA	510b	80353	25.4	6
184 **NBD Bancorp**	463	4897	31	6	6	1.7	16	3.5	NA	300	40937	10.6	6
185 **Melville**	465	4885	47	2	2	2.4	37	3.2	10433	156	4085a	6.4	5
186 **Compaq Computer**	467	4873	58	116	116	2.5	18	0.0	4100	213	2827a	14.3	3
187 **Air Products & Chemicals**	470	4846	43	-9	-9	2.0	17	2.0	3217	277	4492	13.5	3
188 **Masco**	471	4822	32	10	10	2.6	24	2.0	3525	183	3987	10.5	5
189 **Deere**	473	4817	63	38	38	1.8	51	3.2	6961	37	11446	3.6	5
190 **Carnival Cruise Lines**	474	4814	34	19	19	3.5	17	1.6	1474	282	2646	20.7	5
191 **PacifiCorp**	476	4810	18	-20	-20	1.7	19	6.1	3242	150	11257	8.9	1
192 **Chase Manhattan**	478	4800	31	11	11	1.0	9	3.9	NA	639	95900	10.5	6
193 **Consolidated Natural Gas**	480	4790	52	30	30	2.2	24	3.7	2521	195	5242	9.5	1
194 **Hershey Foods**	481	4780	53	30	30	3.3	19	2.0	3220	243	2673	16.9	4
195 **Alltel** (7)	483	4773	52	34	34	3.6	20	3.1	2092	229	3126	17.8	1
196 **American Cyanamid**	485	4753	52	-13	-13	1.8	12	3.4	5268	395	5412	15.6	1

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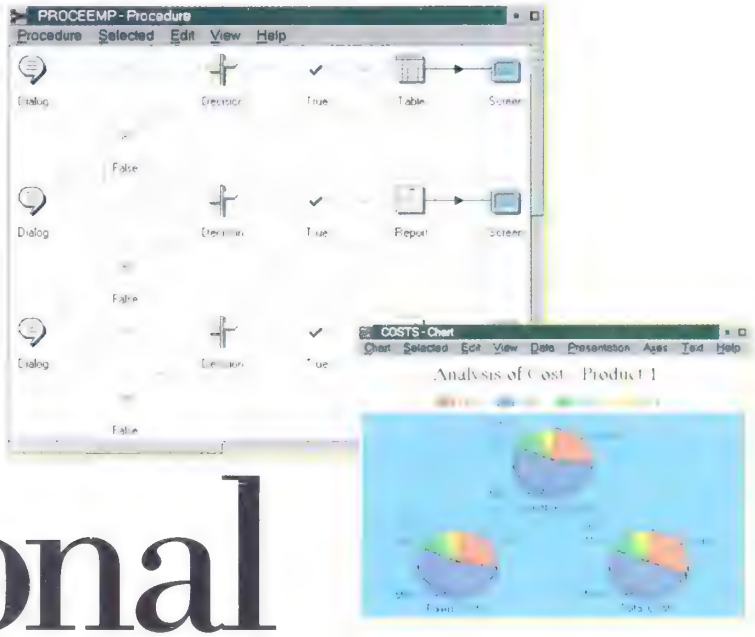

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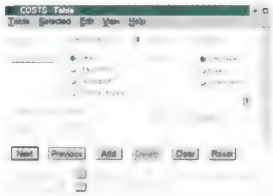

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THE GLOBAL 1000

COUNTRY RANK		GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL.	PRICE PER SHARE U.S. $	% CHANGE FROM 1992 (U.S. $)	% CHANGE FROM 1992 (LOCAL)	PRICE/BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL.	PROFITS U.S. $ MIL.	ASSETS U.S. $ MIL.	RETURN ON EQUITY %	INDU CO
197	**Marion Merrell Dow**	489	4731	17	−48	−48	2.5	8	5.8	3320	685	3183	30.8	4
198	**Burlington Northern**	490	4728	54	20	20	2.8	17	2.2	4630	299	6537	16.1	5
199	**Newmont Gold**	491	4719	45	9	9	5.8	62	0.1	546	87	905	9.4	8
200	**Amgen**	494	4681	36	−42	−42	8.8	14	0.0	1093	358	866a	63.3	4
201	**Syntex**	498	4661	21	46	−46	3.6	19	5.0	2085	472	2809	19.3	4
202	**R. R. Donnelley & Sons**	499	4651	30	4	4	2.5	20	1.7	4193	235	3410	12.8	5
203	**Halliburton**	500	4631	41	40	40	2.3	−38	2.5	6566	−124	4736	−6.0	3
204	**Genentech**	502	4614	41	41	41	4.8	151	0.0	544	21	1305	3.2	4
205	**Dillard Department Stores** (7)	504	4599	41	−2	−2	2.5	19	0.2	4883	236	4107	13.1	5
206	**Textron**	509	4575	52	46	46	1.9	14	2.4	8348	324	18367	13.4	7
207	**Browning-Ferris Industries**	510	4574	27	31	31	3.1	22	2.5	3287	176	4067	14.0	5
208	**Genuine Parts**	511	4547	37	13	13	3.4	19	2.9	3669	220	1597	18.2	3
209	**International Game Technology** (7)	513	4540	37	171	171	15.0	47	0.1	399	65	490	32.2	3
210	**Pennsylvania Power & Light**	515	4519	30	14	14	1.9	15	5.5	2744	347	8192	13.1	1
211	**International Flavors & Fragrances**	519	4481	117	8	8	4.6	25	2.6	1126	177	1268	18.7	2
212	**Bank of New York**	520	4478	55	32	32	1.5	11	2.7	NA	369	40910	13.1	6
213	**Winn-Dixie Stores**	522	4472	58	38	38	4.7	19	2.3	10337	216	1977	24.9	5
214	**Arco Chemical**	524	4461	47	1	1	2.7	18	5.4	3098	253	3599	14.9	2
215	**First Interstate Bancorp**	530	4389	58	47	47	1.7	15	2.7	NA	282	50860a	11.1	6
216	**Amerada Hess**	531	4388	54	18	18	1.4	129	1.1	5970	8	8841a	1.1	1
217	**Consolidated Rail**	532	4373	54	15	15	1.8	16	2.1	3345	282	7096a	11.6	5
218	**TRW**	538	4324	69	26	26	3.1	21	2.7	8311	348	5458	14.7	3
219	**Barnett Banks**	539	4318	46	35	35	1.8	21	3.1	NA	208	39460	8.8	6
220	**Medco Containment Services**	541	4298	29	−6	−6	6.2	36	0.1	1813	103	1235	17.1	4
221	**UNUM** (7)	544	4256	54	41	41	2.5	14	1.5	2641	249	11214	17.8	6
222	**Cigna**	549	4222	59	15	15	0.7	15	5.2	NA	337	66740a	4.7	6
223	**Travelers**	552	4159	29	44	44	0.9	−26	5.5	6688	−104	53600	3.5	6
224	**Wm. Wrigley Jr.** (7)	553	4157	36	49	49	8.0	27	1.9	1287	149	711	29.4	4
225	**Union Electric**	555	4149	41	14	14	1.9	14	5.7	2015	303	5797	13.9	1
226	**Fleet Financial Group**	556	4147	31	3	3	1.6	14	3.3	NA	280	46940	10.9	6
227	**Turner Broadcasting System** (7)	557	4142	22	−2	−2	−13.4	105	0.3	1770	34	2524	−12.8	5
228	**United Healthcare**	558	4137	60	35	35	6.3	33	0.1	1442	114	994	19.1	5
229	**Medtronic**	560	4123	69	−11	−11	5.2	19	0.8	1328b	197b	1164	26.6	4
230	**Illinois Tool Works**	563	4095	73	15	15	3.1	21	1.3	2812	192	2204	14.5	3
231	**First Data** (7)	570	4029	37	50	50	4.9	27	0.3	1205	141	3916	17.9	5
232	**Times Mirror**	572	4011	31	−14	−14	2.4	70	3.5	3702	57	4327	3.4	5
233	**Salomon**	574	4006	37	16	16	1.1	19	1.7	8196	550	159500	6.0	6
234	**Avon Products**	575	4003	56	7	7	12.9	23	2.9	3810	175	1736	57.1	4
235	**Sallie Mae**	576	4001	45	−32	−32	4.0	10	2.7	NA	394	46620	38.8	6
236	**KeyCorp** (7)	578	3970	40	19	19	2.0	12	3.1	2239	246	25457	16.8	6
237	**Transamerica**	586	3923	49	16	16	1.2	11	4.1	NA	343	32300	10.3	6
238	**Torchmark**	589	3896	53	38	38	3.5	14	2.0	NA	266	6770	24.6	6
239	**Rohm & Haas**	590	3893	58	2	2	3.0	19	2.3	3063	211	3446	15.8	2
240	**Baker Hughes**	593	3864	28	18	18	2.4	−93	1.7	2539	5	3213	−2.5	3
241	**National City** (7)	595	3848	48	10	10	1.6	11	4.3	2784	347	28964	14.5	6
242	**Deluxe**	598	3834	46	2	2	5.1	19	3.1	1534	203	1200	27.6	5
243	**Southwest Airlines**	599	3828	41	91	91	4.5	39	0.1	1685	91	2293	11.5	5
244	**Nucor** (7)	601	3811	88	70	70	4.7	45	0.4	1619	79	1490	10.5	2
245	**Woolworth**	603	3809	29	7	7	1.9	15	3.9	9962b	280b	4692	12.8	5
246	**Whirlpool**	607	3781	54	31	31	2.4	20	2.2	7097	205	6118	11.6	4
247	**Geico**	608	3773	53	17	17	2.9	19	1.3	2085	173	4378	15.7	6
248	**Louisiana Pacific**	609	3761	69	59	59	2.8	16	1.3	2185	177	2206	16.8	2
249	**Ohio Edison**	616	3738	25	19	19	1.6	14	6.1	2332	277	7830	10.7	1
250	**Lockheed**	617	3735	61	37	37	1.8	11	3.5	10100	348	6754	17.4	3
251	**H&R Block** (7)	619	3706	35	9	9	7.2	23	2.9	1337	162	963	30.9	6
252	**Morton International** (7)	620	3705	76	34	34	2.9	24	1.3	2044	145	2111	11.9	2
253	**Blockbuster Entertainment** (7)	626	3648	19	36	36	4.3	23	0.4	1201	142	1437	18.8	4
254	**Wheelabrator Technologies**	627	3627	20	45	45	4.0	20	1.2	1483	176	2744a	20.0	7
255	**Society**	629	3619	31	6	6	2.0	12	3.6	NA	335	24980	17.1	6
256	**Duracell International**	630	3599	30	9	9	3.4	21	2.1	1617	167	2157	15.9	4
257	**W. R. Grace**	631	3596	40	18	18	2.3	43	3.5	5518	79	5599	5.5	2
258	**Tyson Foods** (7)	634	3574	24	30	30	2.8	19	0.2	4169	161	2618	14.5	4
259	**Newmont Mining**	636	3570	52	23	23	6.9	67	1.1	613	91	1215	10.3	2
260	**Baltimore Gas & Electric**	637	3569	25	12	12	1.4	15	5.9	2491	264	7375	9.2	1
261	**Ethyl**	639	3566	30	4	4	2.5	13	2.0	2975	269	9204	19.8	2
262	**Martin Marietta**	640	3561	75	44	44	2.2	10	2.2	5954	345	3599	21.5	3
263	**Safeco**	641	3559	57	15	15	1.5	12	3.2	2083	311	13250	12.2	6
264	**Lincoln National**	644	3544	78	35	35	1.2	10	3.9	8034	363	39720	12.5	6
265	**Capital Holding**	645	3531	37	39	39	1.8	12	2.0	2853	322	20590	15.7	6
266	**Ingersoll-Rand**	646	3530	34	11	11	2.7	29	2.1	3784	116	3388	9.3	3
267	**Circus Circus Enterprises** (7)	654	3483	60	46	46	7.1	28	0.0	843	121	950	25.6	5
268	**Tribune**	666	3446	53	20	20	6.0	30	1.8	2109	137	2751	20.3	5
269	**Aon**	668	3425	52	22	22	1.7	16	3.5	1826	206	14290	10.5	6
270	**Crown Cork & Seal**	669	3420	38	14	14	2.9	21	0.0	3781	155	3825	13.9	2
271	**St. Paul**	670	3412	81	12	12	1.4	−19	3.5	4499	−156	13590	−7.2	6
272	**HCA-Hospital Corp. of America** (7)	674	3402	20	−9	−9	2.2	53	0.0	5126	28	5456	4.2	5

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The PROTEUS™ CM-200 radio by Motorola does a remarkable job of keeping pilots and air traffic controllers in voice contact. Not only can it pick up radio transmissions that are slightly off-frequency, it offers uncompromising performance when operating with other radios nearby. But the real news is what this radio doesn't do – yet. Because communication technology and the needs of aviation advance so rapidly, we designed it with enough space to accommodate upgrades that don't exist today. That way, the radio that's new today will still be "new" decades down the road. For Motorola, this focus on the future is just one more way we focus on quality.

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THE GLOBAL 1000

COUNTRY RANK		GLOBAL 1000 RANK	MARKET VALUE U.S. $ MIL	PRICE PER SHARE U.S. $	% CHANGE FROM 1992 (U.S. $)	(LOCAL)	PRICE/BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U.S. $ MIL	PROFITS U.S. $ MIL	ASSETS U.S. $ MIL	RETURN ON EQUITY %	INDU CO
273	**Enron Oil & Gas** (7)	675	3400	43	72	72	4.0	32	0.6	453	98	1731	12.6	1
274	**AutoZone** (7)	676	3390	47	35	35	10.0	47	0.0	1002	63	502	21.1	5
275	**W. W. Grainger**	677	3381	64	25	25	3.9	24	1.1	2364	137	1217a	16.6	3
276	**First Fidelity Bancorporation** (7)	680	3368	45	19	19	1.6	11	3.3	2462	314	31480	14.8	6
277	**General Public Utilities**	681	3366	30	17	17	1.4	13	5.3	3434	252	7724	10.9	1
278	**Citizens Utilities** (7)	698	3283	37	51	51	3.8	27	0.0	589	115	1848	13.9	1
279	**Reebok International**	701	3262	37	28	28	3.9	14	0.8	3023	232	1345	27.6	4
280	**Comerica** (7)	702	3260	28	−8	−8	1.6	14	3.6	2270	226	26587	11.2	6
281	**AFLAC**	704	3255	40	37	37	3.0	17	1.3	3369	183	11901	17.8	6
282	**UAL**	706	3247	134	13	13	2.0	−7	0.0	12890	−417	9876a	−27.9	5
283	**Fluor**	709	3239	40	−9	−9	3.7	24	1.2	6601	135	2365	15.6	3
284	**Household International**	710	3238	70	52	52	1.8	16	3.3	NA	191	31130	11.5	6
285	**CBS**	713	3229	240	25	25	7.2	23	0.4	3503	163	3175	31.6	5
286	**Phelps Dodge**	715	3211	46	3	3	1.7	11	3.6	2579	302	3051a	16.4	2
287	**First Chicago**	716	3201	39	18	18	1.2	−33	3.1	NA	−115	49280	−3.6	6
288	**Fifth Third Bancorp** (7)	717	3189	53	25	25	3.1	18	1.8	895	164	10213	16.7	6
289	**Northeast Utilities**	718	3175	27	13	13	1.7	14	6.6	3217	256	9763	12.0	1
290	**Promus**	721	3150	46	225	225	7.4	55	0.0	1113	51	1596	13.5	5
291	**Hasbro**	725	3135	36	22	22	2.8	18	0.7	2541	179	2083	16.2	4
292	**Hercules**	726	3132	73	35	35	1.8	19	3.1	2865	168	3228	9.7	2
293	**Franklin Resources** (7)	727	3130	38	60	60	5.1	22	0.7	385	124	834	23.5	6
294	**Niagara Mohawk Power**	730	3120	23	24	24	1.4	13	4.4	3702	256	8590	11.0	1
295	**VF**	733	3115	50	8	8	2.6	12	2.4	3824	237	2713	21.0	4
296	**Bausch & Lomb**	734	3106	52	4	4	3.5	18	1.7	1709	171	1874	19.3	4
297	**Champion International**	735	3100	33	17	17	1.0	−88	0.6	4926	14	9381	−1.1	2
298	**CoreStates Financial**	737	3095	53	6	6	1.8	11	4.1	NA	262	23700	16.3	6
299	**Union Camp**	739	3091	44	−9	−9	1.6	106	3.5	3064	43	4739	1.6	2
300	**Circuit City Stores** (7)	740	3085	32	86	86	5.4	28	0.2	3270	110	1263	19.1	5
301	**Food Lion** (7)	742	3084	6	−48	−48	3.2	20	1.4	7196	178	2522	16.0	5
302	**Eaton**	743	3081	89	9	9	3.3	18	2.7	3869	153	3096	18.1	3
303	**American Stores**	746	3069	43	23	23	1.8	15	1.9	19051b	206b	6545b	12.3	5
304	**Sante Fe Pacific**	747	3068	17	36	36	3.3	19	0.6	2496	64	5346	17.0	5
305	**Liberty Media** (7)	748	3064	23	396	396	5.7	NM	0.0	157	14	809	−3.2	5
306	**Dresser Industries**	751	3047	22	5	5	3.2	22	2.7	3797	141	3188	14.7	3
307	**Hillenbrand Industries** (7)	752	3043	43	9	9	5.3	27	1.1	1430	106	1935	19.7	3
308	**Potomac Electric Power**	755	3029	27	9	9	1.7	16	6.2	1602	217	6142	10.5	1
309	**Sun Microsystems**	758	3007	30	8	8	2.0	26	0.0	3589	173	2671	7.7	3
310	**Dow Jones**	759	3006	30	−10	−10	2.1	25	2.7	1818	118	2372	8.4	5
311	**Mellon Bank**	760	3006	55	35	35	1.4	9	2.8	NA	437	31570	15.5	6
312	**Borden**	761	3005	20	−36	−36	1.5	7	5.9	7143	440	5481a	21.7	4
313	**Knight-Ridder**	765	2993	56	−6	−6	2.6	21	2.5	2330	146	2333a	12.2	5
314	**San Diego Gas & Electric** (7)	768	2985	26	10	10	2.0	14	5.7	1871	211	4200	14.2	1
315	**Allegheny Power System**	769	2983	52	17	17	1.6	14	6.2	2307	204	5039	11.3	1
316	**Florida Progress** (7)	773	2965	34	10	10	1.7	16	5.7	2095	192	5333	10.4	1
317	**Long Island Lighting**	776	2957	27	12	12	1.4	12	6.6	2622	302	10249	11.1	1
318	**Newell** (7)	777	2955	38	1	1	3.4	18	1.9	1452	163	1570	18.7	3
319	**Equitable** (7)	786	2919	21	NA	NA	1.4	−64	1.0	6282	−32	78869	−2.2	6
320	**Becton, Dickinson**	787	2916	39	10	10	1.9	14	1.7	2365	201	3178	13.5	4
321	**General Dynamics**	788	2914	94	76	76	1.6	13	1.7	3472	248	4222	11.8	3
322	**Federated Department Stores** (7)	793	2898	23	79	79	1.4	21	0.0	7305	133	7020	6.7	5
323	**Delta Air Lines**	799	2858	58	1	1	1.5	−5	0.3	10837	−506	10162	−33.0	5
324	**McGraw-Hill**	804	2850	58	−5	−5	3.1	18	3.9	2050	153	2508	17.2	5
325	**Washington Post**	805	2847	241	5	5	2.9	21	1.7	1451	128	1568	13.7	5
326	**Fruit of the Loom** (7)	806	2846	38	5	5	3.2	15	0.0	1855	189	2282	21.8	4
327	**Cincinnati Financial** (7)	809	2836	57	28	28	1.6	16	2.0	1304	171	4028	9.5	6
328	**Freeport-McMoRan**	810	2835	20	2	2	7.7	23	6.2	1655	188	3547	34.1	2
329	**Boatmen's Bancshares** (7)	813	2822	58	17	17	1.5	12	3.9	2001	216	23387	12.3	6
330	**Cabletron Systems** (7)	814	2819	100	116	116	10.7	34	0.0	291	58	236	31.7	5
331	**GM Hughes Electronics**	815	2819	31	44	44	NA	17	2.3	12297	576	12931a	NA	3
332	**Dover**	816	2816	48	18	18	3.4	21	1.8	2272	129	1357a	16.4	2
333	**Liz Claiborne**	818	2811	34	−9	−9	3.2	14	1.3	2194	219	1175a	22.2	4
334	**Golden West Financial**	821	2797	44	9	9	1.6	10	0.6	NA	284	25890	16.6	6
335	**Coastal**	822	2796	27	0	0	1.4	−23	1.5	10063	−127	10580	−6.0	1
336	**Chemical Waste Management**	824	2766	13	−29	−29	2.4	21	1.5	1518	130	2442	11.4	5
337	**Northern States Power**	826	2762	44	8	8	1.7	18	5.7	1997	161	4978	9.6	1
338	**CUC International** (7)	827	2761	26	86	86	15.7	42	0.0	739	59	479	37.9	5
339	**Wisconsin Energy**	828	2758	27	3	3	1.8	16	5.1	1552	170	3745	11.4	1
340	**Lowe's** (7)	831	2755	38	72	72	3.6	30	0.8	3846	85	1609	11.8	5
341	**First Bank System**	833	2746	30	13	13	2.0	24	4.1	NA	124	23530	8.3	6
342	**Mead**	834	2746	47	26	26	1.8	62	2.1	4703	38	4031	2.9	2
343	**Sun**	836	2740	26	−10	−10	1.4	−11	7.0	10682	−317	6071	−13.4	1
344	**Sherwin-Williams**	838	2737	31	9	9	3.0	19	1.6	2748	145	1730	16.1	2
345	**Comcast**	840	2733	21	27	27	NM	−14	0.7	900	−218	4272	NM	5
346	**Union Carbide**	844	2720	19	60	60	2.0	26	4.0	4872	119	4941	7.9	2
347	**Reynolds Metals**	846	2712	46	−26	−26	0.9	414	2.2	5656	45	6685a	0.2	2
348	**MBIA** (7)	855	2684	64	22	22	1.9	13	1.3	328	189	2885	14.3	6

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THE GLOBAL 1000

RY	GLOBAL 1000 RANK	MARKET VALUE U S $ MIL	PRICE PER SHARE U.S. $	% CHANGE FROM 1992 (U.S. $)	(LOCAL)	PRICE/ BOOK VALUE RATIO	P/E RATIO	YIELD %	SALES U S $ MIL	PROFITS U S $ MIL	ASSETS U S $ MIL	RETURN ON EQUITY %	INDUSTRY CODE
Clorox	856	2683	50	4	4	3.3	21	3.6	1717	118	1615	15.9	44
Federal Express	857	2682	49	20	20	1.7	−37	0.0	7551	−114	5463	−4.6	52
Scott Paper	860	2673	36	15	−15	1.3	18	2.2	4886	167	6493a	7.3	45
New England Electric System	861	2664	41	26	26	1.8	15	5.3	2182	185	4585	11.7	12
Harcourt General	863	2661	35	52	52	2.9	23	1.6	3717	114	5287	12.4	71
Cooper Tire & Rubber (7)	865	2652	32	26	26	5.4	23	0.6	1175	108	797	23.2	37
Teco Energy (7)	867	2648	46	18	18	2.7	18	4.2	1183	153	3024	15.2	12
Sonat	874	2631	61	63	63	2.5	21	3.3	1484	101	3165	12.1	12
Republic New York	876	2610	50	13	13	1.5	11	2.2	NA	259	37150	13.9	61
Marriott	878	2608	26	54	54	4.5	36	1.1	8722	85	6410	12.2	53
Pennzoil	879	2601	64	31	31	2.2	51	4.7	2357	17	4457	4.4	11
McDonnell Douglas	883	2587	66	54	54	0.9	14	2.1	17384	22	13780	6.0	31
Homestake Mining	885	2582	19	50	50	5.6	15	0.5	683	−176	1145	−37.1	81
USX-U. S. Steel Group	887	2578	43	75	75	11.6	−10	2.3	4947	−271	6251	NM	25
Advanced Micro Devices	896	2525	29	82	82	2.4	12	0.0	1514	245	1448	19.4	35
Kerr-McGee	901	2511	52	23	23	1.9	NM	2.9	3382	−26	3521	−1.0	11
Temple Inland	902	2507	45	−12	−12	1.5	18	2.2	2713	147	10766	8.5	23
Jefferson-Pilot	903	2507	49	18	18	1.6	12	3.2	NA	203	4925a	13.2	63
Bear Stearns (7)	904	2506	22	39	39	2.0	8	2.7	2677	295	45768	25.1	62
Centerior Energy	907	2501	18	1	1	0.9	11	9.1	2438	212	12071	7.8	12
Nalco Chemical	917	2477	35	1	1	4.4	18	2.5	1375	145	1351	23.8	22
Nordstrom	919	2459	30	6	−6	2.3	19	1.1	3422b	137b	2053b	12.1	54
U. S. Bancorp (7)	925	2431	25	−2	−2	1.6	11	3.1	1935	208	20741	14.1	61
SynOptics Communications (7)	926	2431	40	336	336	10.2	45	0.0	389	42	260	22.8	52
QVC Network (7)	927	2430	68	224	224	5.2	48	0.0	1071	57	700	10.9	51
MBNA (7)	929	2426	25	23	23	3.6	14	3.9	1172	173	6455	26.1	61
First Financial Management (7)	931	2404	41	43	43	2.1	103	0.2	1388	16	1546	2.0	62
Supervalu	933	2400	34	29	29	2.5	15	2.3	12568b	165b	2484	16.9	54
TJX (7)	937	2389	33	85	85	6.0	22	1.5	3261	104	1305	27.3	54
Engelhard	939	2384	36	47	47	3.2	24	1.7	2400	100	1256a	13.4	24
Sigma-Aldrich (7)	940	2378	48	−2	−2	4.5	24	0.6	654	95	616	18.8	45
Hilton Hotels	942	2373	50	3	3	2.5	23	2.4	1230	104	2187a	10.9	53
Premier Industrial (7)	945	2363	27	16	16	6.0	28	1.3	641	79	407	21.8	37
Silicon Graphics (7)	946	2363	36	102	102	4.5	−33	0.0	867	−118	758	−13.7	52
New York State Electric & Gas (7)	947	2363	34	20	20	1.5	15	6.4	1692	184	5176	10.0	12
Dana	950	2340	51	24	24	2.1	26	3.1	4872	80	4179a	8.2	37
Litton Industries	952	2336	58	23	23	1.7	14	0.0	5693	174	4839	12.7	71
Shaw Industries (7)	956	2330	33	35	35	3.7	26	1.1	1751	58	1090	14.3	47
State Street Boston (7)	959	2326	31	−17	−17	2.3	14	1.6	1417	160	16490	16.6	61
Mattel	960	2319	24	5	5	4.4	16	1.0	1848	144	1260	26.9	46
General Instrument (7)	962	2315	39	NA	NA	7.6	NM	0.0	1075	−41	1728	−0.6	35
Pioneer Hi-Bred International	966	2308	26	−1	−1	2.9	18	1.9	1262	152	1216	16.4	26
New York Times	967	2302	29	−5	−5	2.3	NM	1.9	1774	−11	1995	−1.4	51
Panhandle Eastern	968	2301	21	28	28	1.6	12	3.8	2431	189	6399	13.7	12
Anadarko Petroleum (7)	972	2288	41	61	61	3.5	60	0.7	375	27	1905	5.8	11
Lubrizoil	978	2267	33	0	0	2.8	20	2.5	1552	125	1127	14.1	22
Mylan Laboratories (7)	979	2267	29	66	66	7.7	32	0.4	212	71	351	24.3	45
Northern Trust (7)	983	2263	43	8	8	2.6	16	1.7	1231	150	14960	16.4	61
Imcera Group	984	2263	30	−11	−11	1.9	17	1.5	1703	137	2051	11.1	22
Galen Health Care	985	2262	14	NA	NA	1.8	9	NA	4043	288	3364	21.2	52
Williams	990	2255	49	63	63	1.8	12	3.1	2448	128	4982	14.9	22
Brown-Forman (7)	994	2246	83	12	12	2.9	15	3.3	1260	146	1194	19.5	43
Southern New England Telecomms.	996	2241	35	9	9	1.8	14	5.0	1614	159	3484	12.7	55
Unitrin (7)	997	2241	43	26	26	1.1	14	2.8	1363	163	4621	8.2	63
Dole Food (7)	1000	2236	38	27	27	2.1	25	1.1	3376	65	3095	8.7	44

TO INDUSTRY CODES Left-hand digit represents broad economic sector as defined by Morgan Stanley Capital International Right-hand digit is industry classification code within each economic sector

EN-ERGY
11. Energy sources
12. Utilities-electrical & gas
MATERIALS
21. Building materials & components
22. Chemicals
23. Forest products & paper
24. Metals-nonferrous
25. Metals-steel
26. Misc. materials & commodities
CAPITAL EQUIPMENT
31. Aerospace & military technology
32. Construction & housing
33. Data processing & reproduction
34. Electrical & electronics
35. Electronic components & instruments
36. Energy equipment & services
37. Industrial components
38. Machinery & engineering
4. CONSUMER GOODS
41. Appliances & household durables
42. Automobiles
43. Beverages & tobacco
44. Food & household products
45. Health & personal care
46. Recreation, other consumer goods
47. Textiles & apparel
5. SERVICES
51. Broadcasting & publishing
52. Business & public services
53. Leisure & tourism
54. Merchandising
55. Telecommunications
56. Transportation-airlines
57. Transportation-road & rail
58. Transportation-shipping
59. Wholesale & international trade
6. FINANCE
61 Banking
62. Financial services
63. Insurance
64. Real estate
7. OTHER
71 Multi-industry
81. Gold mines

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THE GLOBAL 1000

ALPHABETICAL LIST OF COMPANIES

The number preceding each company is its Global 1000 rank. The code following each company shows its nationality and rank within that nation.
To find the statistics for a company, turn to the country listing and look for the company by its rank.[4]

A

866 Aachener & Munchener Bet (GE 28)
176 [illegible]
247 [illegible]
53 [illegible]
257 [illegible]
823 [illegible]
896 [illegible]
505 Aegon (NE 7)
378 [illegible]
704 [illegible]
NR [illegible]
923 [illegible]
359 AGF (FR 18)
797 [illegible]
268 [illegible]
470 Air Products & Chemicals (US 187)
724 [illegible]
253 Ajinomoto (JA 83)
621 Akzo (NE 10)
311 Albertson's (US-119)
534 Alcan Aluminum (CA 11)
94 Alcatel-Alsthom (FR 2)
562 Alcatel Cable (FR 22)
107 All Nippon Airways (JA 34)
404 Alleanza Assicurazioni (IT 5)
769 [illegible]
40 Allianz Holding (GE 1)
898 Allied Irish Banks (IR 1)
295 [illegible]
213 AlliedSignal (US 82)
483 Allied (US 195)
386 Aluminum Co. of America (US 153)
741 Amada (JA 208)
764 Amcor (AS-11)
531 Amerada Hess (US-216)
337 American Barrick Resources (CA 7)
324 American Brands (US 125)
485 American Cyanamid (US-196)
346 American Electric Power (US 138)
120 [illegible]
323 American General (US 124)
63 American Home Products (US 32)
36 American International Group (US-19)
950 American Re (US-384)
746 American Stores (US-303)
2 American Telephone & Telegraph (US 1)
72 Ameritech (US-36)
NR AMEV (NE-14)
494 Amgen (US 200)
35 [illegible]
928 Amoy Properties (HK 21)
343 AMP (US-135)
427 AMR (US-168)
972 Anadarko Petroleum (US 393)
309 Anglo American (SA 1)
113 Anheuser-Busch (US 53)
781 ANZ Banking Group (AS-12)
924 Aon (JA 260)
668 Aon (US 269)
327 Apple Computer (US 126)
754 [illegible]
252 Archer Daniels Midland (US 93)
524 Arco Chemical (US 214)
366 Argyll Group (BR 35)
991 Arthur Wiggins Appleton (BR 91)
37 Asahi Bank (JA 12)
486 Asahi Breweries (JA 45)
220 Asahi Chemical Industry (JA 73)
144 Asahi Glass (JA 47)
723 ASDA Group (BR 67)
NR ASEA (SWE 4)
414 Ashikaga Bank (JA 133)
78 Assicurazioni Generali (IT 1)
697 Associated British Foods (BR 65)
137 Astra (SWE 1)
68 Atlantic Richfield (US 33)
319 Automatic Data Processing (US 122)
676 AutoZone (US 274)
575 Avon Products (US 234)
292 Axa (FR 13)

B

367 BAA (BR 36)
593 Baker Hughes (US 240)
637 Baltimore Gas & Electric (US 260)
111 Banc One (US-52)
613 Banca Commerciale Italiana (IT 10)
551 Banca di Roma (IT-7)
382 Banco Bilbao Vizcaya (SP 4)
482 Banco Central (SP 7)
442 Banco de Santander (SP-6)
690 Banco Popular Español (SP 10)
808 Bank of East Asia (HK 18)
406 Bank of Fukuoka (JA 130)
569 Bank of Hiroshima (JA 162)
871 Bank of Kyoto (JA 241)
448 Bank of Montreal (CA-9)
520 Bank of New York (US-212)
561 Bank of Nova Scotia (CA 15)
913 Bank of Scotland (BR 80)
38 Bank of Tokyo (JA 13)
150 Bank of Yokohama (JA-51)
104 BankAmerica (US-49)
371 Bankers Trust New York (US-146)
899 Banyu Pharmaceutical (JA 252)
156 Barclays Bank (BR 20)
539 Barnett Banks (US-219)
251 BASF (GE 11)
356 Bass (BR 33)
67 B.A.T Industries (BR-6)
734 Bausch & Lomb (US 296)
249 Baxter International (US-92)
167 Bayer (GE 7)
419 Bayerische Hypotheken (GE 13)
431 Bayerische Vereinsbank (GE 14)
NR BBC Brown Boveri (SWI-10)
177 BCE (Bell Canada Enterprises) (CA 2)
904 Bear Stearns (US-367)
787 Becton, Dickinson (US 320)
51 Bell Atlantic (US 24)
45 BellSouth (US 21)
83 Berkshire Hathaway (US-41)
685 BEX (SP-9)
619 [illegible]
626 Blockbuster Entertainment (US-253)
853 Blue Circle Industries (BR 79)
439 BMW (GE-17)
290 BNP (FR 12)
813 Boatmen's Bancshares (US-329)
468 BOC Group (BR 42)
126 Boeing (US 58)
315 Boots (BR 29)
761 Borden (US-312)
915 Bouygues (FR 4)
618 Bowater (BR 56)
201 Bridgestone (JA-67)
25 [illegible]
517 British Airways (BR 47)
71 British Gas (BR-7)
41 British Petroleum (BR 4)
763 British Steel (BR 70)
19 British Telecommunications (BR-1)
100 [illegible]
510 Browning Ferris Industries (US-207)
994 Brown Forman (US 400)
179 BSN (FR-4)
77 BTR (BR-9)
408 BTR Nylex (AS-4)
490 Burlington Northern (US 198)
335 Burlington Resources (US-131)

C

147 Cable & Wireless (BR-18)
814 Cabletron Systems (US-330)
441 [illegible]
194 Campbell Soup (US 74)
461 Canadian Imperial Bank (CA-10)
423 Canadian Pacific (CA 8)
466 Canal Plus (FP 20)
192 Canon (JA-63)
932 Canon Sales (JA 262)
236 Capital Cities/ABC (US 88)
645 Capital Holding (US-265)
877 Carlsberg (DE 5)
949 Carlton Communications (BR 84)
474 Carnival Cruise Lines (US 190)
772 Carnaud Metalbox (FR 31)
451 Carolina Power & Light (US-177)
349 Carrefour (FR 6)
895 Carter Hall Harvey (NZ 2)
841 Casio Computer (JA 231)
293 Caterpillar (US 113)
566 Cathay Pacific Airways (HK 14)
713 CBS (US-285)
907 Centerior Energy (US-368)
372 Central & South West (US 147)
938 Cetelem (FR 42)
735 Champion International (US-297)
478 Chase Manhattan (US 192)
212 Chemical Banking (US-81)
824 Chemical Waste Management (US 336)
259 Cheung Kong Holdings (HK 7)
32 Chevron (US 15)
279 Chiba Bank (JA 90)
245 China Light & Power (HK 5)
766 Chiyoda Corp. (JA 2-3)
964 [illegible]
102 Chrysler (US 47)
276 Chubb (US 105)
70 Chubu Electric Power (JA 23)
638 Chugai Pharmaceutical (JA 180)
803 Chuo-Ku Bank (JA 225)
204 Chugoku Electric Power (JA 68)
133 [illegible]
549 Cigna (US 222)
809 [illegible]
740 Circuit City Stores (US 300)
654 Cities Service Enterprises (US 267)
332 Cisco Systems (US 128)
198 Citicorp (US 76)
722 Citizen Watch (JA 203)
698 Citizens Utilities (US 278)
856 Clorox (US-349)
399 [illegible]
822 Coastal (US 335)
14 Coca-Cola (US-5)
525 Coles Myer (AS 8)
224 Colgate-Palmolive (US 85)
840 Comcast (US 345)
702 [illegible]
484 Commercial Union Assurance (BR 43)
438 Commerzbank (GE 16)
477 Commonwealth Bank of Australia (AS-6)
377 Commonwealth Edison (US-148)
892 Compagnie de Navigation Mixte (FR 39)
352 Compagnie de Saint-Gobain (FR 17)
274 Compagnie Financiere de Suez (FR-11)
181 Compagnie Generale des Eaux (FR-6)
467 Compaq Computer (US-186)
453 Computer Associates Intl (US-179)
384 ConAgra (US-152)
264 Consolidated Edison of New York (US-99)
480 Consolidated Natural Gas (US-193)
532 Consolidated Rail (US-217)
394 Cooper Industries (US 157)
865 Cooper Tire & Rubber (US-354)
737 CoreStates Financial (US 298)
344 Corning (US 136)
492 Corporacion Bancaria de España (SP 8)
523 Cosmo Oil (JA-153)
687 Courtaulds (BR-63)
341 CPC International (US 134)
430 CRA (AS-5)
872 Crédit Commercial de France (FR-38)
868 Crédit Local de France (FR 37)
526 Crédit Lyonnais (FR 21)
775 Credito Italiano (IT 11)
669 Crown Cork & Seal (US-270)
187 CS Holding (SWI 6)
862 CSR (AS-13)
289 CSX (US 112)
827 CUC International (US-338)

D

12 [illegible]
165 Dai Nippon Printing (JA 56)
731 Dai-Tokyo Fire & Marine (JA-206)
954 Daido Steel (JA 270)
512 Daiei (JA 151)
540 Daiichi Pharmaceutical (JA 156)
951 Daikin Industries (JA-269)
92 Daimler Benz (GE 4)
582 Dainippon Ink & Chemicals (JA 168)
870 Dairy Farm International Holdings (HK 19)
580 Daishowa Paper (JA-167)
98 Daiwa Bank (JA 29)
314 Daiwa House Industry (JA 102)
88 Daiwa Securities (JA-26)
683 Dampskibsselskabet af 1912 (DE 3)
682 Dampskibsselskabet Svenborg (DE-2)
950 Dana (US-384)
435 Dayton Hudson (US-172)
330 De Beers Centenary (SA 2)
393 Dean Witter, Discover (US-156)
473 Deere (US 189)
799 Delta Air Lines (US 323)
598 Deluxe (US-242)
825 Den Danske Bank (DE 4)
446 Detroit Edison (US-175)
69 Deutsche Bank (GE 3)
596 Development Bank of Singapore (SI 3)
400 Digital Equipment (US 159)
504 Dillard Department Stores (US-205)
55 Disney (Walt) (US-28)
1000 Dole Food (US-403)
306 Dominion Resources (US-117)
499 Donnelley (R.R.) & Sons (US 202)
790 Dordtsche Petroleum (NE 12)
816 Dover (US 332)
103 Dow Chemical (US 48)
759 Dow Jones (US 310)
215 Dresdner Bank (GE 9)
751 Dresser Industries (US 306)
835 Drieffontein Consolidated (SA 4)
263 Duke Power (US 98)
182 Dun & Bradstreet (US 72)
21 DuPont (US-8)
630 Duracell International (US 256)

EF

970 EA General (AT 2)
87 Eastman Kodak (US-44)
743 Eaton (US-302)
594 Ebara (JA 172)
548 Eisai (JA 160)
211 Electrabel (BE 1)
987 Electrolux (SWE 10)
272 Electronic Data Systems (US 103)
79 Elf Aquitaine (FR-1)
719 Elf Sanofi (FR 29)
NR Elsevier (NE-6)
123 Emerson Electric (US 56)
231 Endesa (SP 2)
939 Engelhard (US 378)
321 Enron (US 123)
675 Enron Oil & Gas (US 273)
362 Entergy (US-143)
657 Enterprise Oil (BR 60)
786 Equitable (US 319)
217 Ericsson (LM) (SWE 2)
728 Erdorf & Begin Say (FR-30)
639 Ethyl (US 261)
662 Eurotunnel (FR/BR NR)
NR Eurotunnel (London) (BR-93)
NR Eurotunnel (Paris) (FR 45)
4 Exxon (US-2)
64 Fannie Mae (US-33)
227 Fanuc (JA 76)
857 Federal Express (US-350)
230 Federal Home Loan Mortgage (US 87)
793 Federated Department Stores (US-322)
267 Fiat Group (IT 4)
717 Fifth Third Bancorp (US 288)
833 First Bank System (US-341)
716 First Chicago (US-287)
570 First Data (US-231)
680 First Fidelity Bancorporation (US-276)
931 First Financial Management (US-375)
530 First Interstate Bancorp (US-215)
288 First Union (US-111)
556 Fleet Financial Group (US-226)
773 Florida Progress (US-316)
709 Fluor (US-283)
742 Food Lion (US 301)
46 Ford Motor (US-22)
914 Forte (BR 81)
450 Fortis (NE/BE-NR)
893 Fosters Brewing Group (AS-14)
317 FPL Group (US-120)
727 Franklin Resources (US-293)
810 Freeport-McMoRan (US-328)
455 Freeport-McMoRan C&G (US 181)
806 Fruit of the Loom (US-326)
11 [illegible]
650 Fuji Electric (JA-186)
135 Fuji Photo Film (JA 43)
771 Fujikura (JA-215)
711 Fujisawa Pharmaceutical (JA 201)
750 Fujita Corp. (JA-210)
894 Fujita Kanko (JA-251)
140 Fujitsu (JA-44)
736 Fukuyama Transporting (JA-207)
545 Furukawa Electric (JA-158)

G

985 Galen Health Care (US-398)
811 GAN (FR-32)
284 Gannett (US 108)
449 Gap (US 176)
608 Geico (US-247)
656 Gencor (SA 3)
502 Genentech (US 204)
587 General Accident Fire & Life Assurance (BR-52)
788 General Dynamics (US-321)
5 General Electric (US-3)
128 General Electric Co. (BR-14)
962 General Instrument (US-389)
171 General Mills (US-70)
33 General Motors (US 16)
681 General Public Utilities (US 277)
205 General Re (US-80)
700 Generale de Banque (BE 5)
651 Genting (MA 4)
511 Genuine Parts (US-208)
389 Georgia-Pacific (US-154)
160 Gillette (US 67)
31 Glaxo Holdings (BR-3)
815 GM Hughes Electronics (US 331)
821 Golden West Financial (US 334)
370 Goodyear Tire & Rubber (US 145)
631 Grace (W.R.) (US-257)
677 Grainger (W.W.) (US 275)
792 Granada Group (BR 73)
136 Grand Metropolitan (BR 17)
433 Great Lakes Chemical (US 170)
350 Great Universal Stores (BR 32)
849 Green Cross (JA 235)
988 Groupe Bruxelles Lambert (BE 9)
848 Groupe Schneider (FR 35)
506 Gruppo Bancario San Paolo (IT-6)
23 GTE (US 10)
957 Guardian Royal Exchange (BR-87)
112 Guinness (BR 11)
405 Gunma Bank (JA-129)

H

373 Hachijuni Bank (JA 116)
500 Halliburton (US 203)
109 Hang Seng Bank (HK 2)
413 Hankyu Corp. (JA 132)
85 Hanson Trust (BR 10)
387 Hanwa (JA 121)
863 Harcourt General (US 353)
725 Hasbro (US 291)
707 Hasegawa Komuten (JA-200)
625 Havas (FR 24)
674 HCA-Hospital Corp. of America (US 272)
565 Heineken (NE 9)
203 Heinz (H.J.) (US 79)
462 Henderson Land Development (HK-11)
507 Henkel (GE 18)
726 Hercules (US-292)
481 Hershey Foods (US 194)
62 Hewlett-Packard (US-31)
752 Hilenbrand Industries (US 307)
942 Hilton Hotels (US 380)
906 Hino Motors (JA-254)
812 Hitachi Cable (JA 227)
43 Hitachi Ltd. (JA-15)
665 Hitachi Metals (JA-189)
395 Hitachi Zosen (JA-125)
655 Hochtief (GE-21)
233 Hoechst (GE-10)
380 Hokkaido Electric Power (JA-119)
364 Hokkaido Takushoku Bank (JA-114)
447 Hokuriku Bank (JA-139)
388 Hokuriku Electric Power (JA-122)
875 Holderbank (SWI-13)
66 Home Depot (US-34)
885 Homestake Mining (US-361)
149 Honda Motor (JA-50)
432 Honeywell (US-169)
91 Hong Kong Telecommunications (H
757 Hongkong & China Gas (HK-16)
475 Hongkong Electric Holdings (HK-
396 Hongkong Land Holdings (HK-9)
778 Hopewell Holdings (HK-17)
977 House Food Industrial (JA-277)
710 Household International (US-284)
390 Houston Industries (US-155)
50 HSBC Holdings (BR-5)
183 Hutchison-Whampoa (HK-3)

I

428 Iberdrola (SP-5)
563 Illinois Tool Works (US-230)
661 Imasco (CA-16)
984 Imcera Group (US-397)
119 Imperial Chemical Industries (BR 1
294 Imperial Oil (CA-4)
918 Inax (JA-259)
495 Inchcape (BR-44)
920 Inco (CA-21)
9 Industrial Bank of Japan (JA-4)
646 Ingersoll-Rand (US-266)
52 Intel (US-25)
27 International Business Machines (U
519 International Flavors & Fragrances (U
513 International Game Technology (US
265 International Paper (US-100)
206 Internationale Nederlanden Groep
905 Isar-Amperwerke (GE-30)
614 Isetan (JA-177)
353 Ishikawajima-Harima Heavy Industries (J
459 Isuzu Motors (JA-141)
95 Ito-Yokado (JA-27)
282 Itochu (JA 91)
195 ITT (US-75)

JK

121 Japan Air Lines (JA 39)
412 Jardine Matheson Holdings (HK-1
712 Jardine Strategic Holdings (HK 15)
903 Jefferson-Pilot (US-366)
29 Johnson & Johnson (US 13)
301 Joyo Bank (JA-97)
385 Jusco (JA-120)
269 Kajima (JA 86)
829 Kamigumi (JA-229)
567 Kandenko (JA-161)
976 Kaneka (JA-276)
869 Kankaku Securities (JA-240)
39 Kansai Electric Power (JA-14)
303 Kao (JA-99)
830 Karstadt (GE-27)
897 Kauhof (GE-29)
392 Kawasaki Heavy Industries (JA-12
975 [illegible]
162 Kawasaki Steel (JA-55)
302 KDD (JA 98)
660 Keihin Electric Express Railway (JA-
592 Keio Teito Electric Railway (JA-171)
688 Keisei Electric Railway (JA-193)
139 Kellogg (US 62)
999 Keppel (SI 5)
901 Kerr McGee (US-364)
578 KeyCorp (US-236)
281 Kimberly-Clark (US-107)
547 Kinden (JA-159)
437 Kingfisher (BR-40)
161 Kinki Nippon Railway (JA-54)
130 Kirin Brewery (JA-41)
223 Kmart (US-84)
765 Knight-Ridder (US-313)
225 Kobe Steel (JA-75)
699 Kokuyo (JA-199)
250 Komatsu (JA-82)
941 Konica (JA 265)
801 Kredietbank (BE-8)
246 [illegible]
642 Kumagai Gumi (JA-181)
692 Kuraray (JA 194)
208 Kyocera (JA 70)
487 Kyowa Hakko (JA 146)
142 Kyushu Electric Power (JA-46)
464 Kyushu Matsushita Electric (JA-142)

L

756 Ladbroke Group (BR-69)
632 Lafarge Coppee (FR-25)
963 Lafalaw (CA 22)
535 Land Securities (BR-49)
633 Legal & General Group (BR 58)

THE GLOBAL 1000

LPHABETICAL LIST OF COMPANIES

number preceding each company is its Global 1000 rank. The code following each company shows its nationality and rank within that nation
nd the statistics for a company, turn to the country listing and look for the company by its rank

Legrand (FR-44)
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible]
Lloyds Abbey Life (BR-46)
[illegible]
[illegible]
[illegible]
Long Island Lighting (US-317)
Long-Term Credit Bank of Japan (JA-20)
Louisiana Pacific (US-248)
Lowe's (US-340)
Lubrizol (US-394)
LVMH Moët Hennessy (FR-5)
[illegible]

Maeda Road Construction (JA-264)
[illegible] (JA-245)
[illegible] Banking (MA-5)
[illegible] (GE-[illegible])
[illegible] (GE-15)
[illegible] (US-[illegible])
Marks & Spencer (BR-12)
[illegible] (US-[illegible])
Marsh & McLennan (US-[illegible])
Martin Marietta (US-262)
Marubeni (JA-101)
[illegible] (JA-[illegible])
Masco (US-188)
Matsushita Communication Industrial (JA-173)
Matsushita Electric Industrial (JA-17)
Matsushita Electric Works (JA-88)
Matsushita Kotobuki Electric (JA-[illegible])
Mattel (US-388)
May Department Stores (US-86)
Mazda Motor (JA-137)
MBIA (US-348)
MBNA (US-374)
McCaw Cellular Communications (US-97)
McDonald's (US-39)
McDonnell Douglas (US-360)
McGraw-Hill (US-324)
MCI Communications (US-55)
Mead (US-342)
Medco Containment Services (US-220)
Mediobanca (IT-9)
Medtronic (US-229)
Meiji Milk Products (JA-219)
Meiji Seika (JA-239)
Mellon Bank (US-311)
Melville (US-185)
Mercedes-Automobil-Holding (GE-19)
Merck (US-7)
Merrill Lynch (US-102)
Michelin (FR-34)
Microsoft (US-20)
Minnesota Mining & Mfg. (US-23)
Mitsubishi Bank (JA-2)
Mitsubishi Corp. (JA-28)
Mitsubishi Electric (JA-52)
Mitsubishi Estate (JA-42)
Mitsubishi Gas Chemical (JA-266)
Mitsubishi Heavy Industries (JA-19)
Mitsubishi Kasei (JA-92)
Mitsubishi Materials (JA-131)
Mitsubishi Motors (JA-113)
Mitsubishi Oil (JA-192)
Mitsubishi Petrochemical (JA-179)
Mitsubishi Rayon (JA-258)
Mitsubishi Trust & Banking (JA-31)
Mitsubishi Warehouse & Transportation (JA-274)
Mitsui Engineering & Shipbuilding (JA-184)
Mitsui Marine & Fire (JA-112)
Mitsui Mining & Smelting (JA-246)
Mitsui O.S.K. Lines (JA-148)
Mitsui Petrochemical Industries (JA-271)
Mitsui Real Estate Sales (JA-64)
Mitsui Toatsu Chemicals (JA-202)
Mitsui Trust & Banking (JA-53)
Mitsui & Co. (JA-59)
Mitsukoshi (JA-165)
Mobil (US-17)
Mochida Pharmaceutical (JA-223)
Monsanto (US-118)
Morgan Stanley Group (US-183)
Morgan (J.P.) (US-60)
Morton International (US-252)
Motorola (US-30)
Münchener Rück (GE-5)
Murata Mfg. (JA-127)
Mylan Laboratories (US-395)

Nagoya Railroad (JA-154)
Nalco Chemical (US-369)
National Australia Bank (AS-3)
National City (US-241)
National Power (BR-28)
National Westminster Bank (BR-19)
152 NationsBank (US-65)
463 NBD Bancorp (US-184)
948 NCR Japan (JA-268)
115 NEC (JA-35)
28 Nestlé (SW-2)
861 New England Electric System (US-352)
789 New Japan Securities (JA-221)
508 New World Development (HK-13)
947 New York State Electric & Gas (US-383)
967 New York Times (US-391)
777 Newell (US-318)
491 Newmont Gold (US-199)
636 Newmont Mining (US-259)
232 News Corp. (AS-2)
612 NGK Insulators (JA-176)
730 Niagara Mohawk Power (US-294)
729 Nichido Fire & Marine (JA-205)
573 Nichii (JA-164)
995 Nichirei (JA-281)
847 Nihon Cement (JA-234)
410 Nike (US-161)
401 Nikko Kyodo (JA-128)
106 Nikko Securities (JA-33)
679 Nikon (JA-191)
145 Nintendo (JA-48)
197 Nippon Credit Bank (JA-66)
189 Nippon Express (JA-61)
542 Nippon Fire & Marine (JA-157)
891 Nippon Hodo (JA-250)
622 Nippon Light Metal (JA-178)
696 Nippon Meat Packers (JA-198)
210 Nippon Oil (JA-71)
391 Nippon Paper (JA-123)
890 Nippon Sheet Glass (JA-249)
807 Nippon Shinpan (JA-226)
44 Nippon Steel (JA-16)
1 Nippon Telegraph & Telephone (JA-1)
930 Nippon Television Network (JA-261)
331 Nippon Yusen (JA-107)
116 Nippondenso (JA-36)
852 Nishi-Nippon Bank (JA-237)
82 Nissan Motor (JA-25)
881 Nisshin Flour Milling (JA-244)
518 Nisshin Steel (JA-152)
653 Nissho Iwai (JA-187)
643 Nissin Food Products (JA-182)
170 NKK (JA-58)
20 Nomura Securities (JA-11)
762 Noranda (CA-19)
919 Nordstrom (US-370)
240 Norfolk Southern (US-89)
407 Norsk Hydro (NO-1)
850 North West Water Group (BR-78)
718 Northeast Utilities (US-289)
971 Northern Foods (BR-89)
826 Northern States Power (US-337)
234 Northern Telecom (CA-3)
983 Northern Trust (US-396)
300 Norwest (US-116)
744 Nova Corp. of Alberta (CA-18)
244 Novell (US-91)
672 Novo-Nordisk (DE-1)
694 NSK (JA-196)
900 NTN (JA-253)
601 Nucor (US-244)
84 Nynex (US-42)

OPQ

559 OCBC Overseas Chinese Bank (SI-2)
333 Occidental Petroleum (US-129)
418 Odakyu Electric Railway (JA-135)
457 Ohbayashi (JA-140)
616 Ohio Edison (US-249)
375 Oji Paper (JA-117)
800 Oki Electric Industry (JA-224)
859 Olympus Optical (JA-238)
749 Omron (JA-209)
326 Ono Pharmaceutical (JA-105)
820 Onoda Cement (JA-228)
369 Oracle Systems (US-144)
159 Oréal (L') (FR-3)
795 Orient (JA-222)
148 Osaka Gas (JA-49)
732 Pacific Dunlop Olympic (AS-10)
110 Pacific Gas & Electric (US-51)
73 Pacific Telesis (US-37)
476 PacifiCorp (US-191)
554 Pancanadian Petroleum (CA-14)
968 Panhandle Eastern (US-392)
351 Paramount Communications (US-140)
340 Paribas (FR-14)
980 Pasteur-Merieux (FR-43)
611 Pearson (BR-54)
858 Pechiney (FR-36)
708 Pechiney International (FR-28)
429 Pennsylvania & Oriental Steam Navigation (BR-39)
163 Penney (J.C.) (US-68)
515 Pennsylvania Power & Light (US-210)
879 Pennzoil (US-359)
30 PepsiCo (US-14)
703 Pernod Ricard (FR-27)
374 Petrofina (BE-2)
460 Peugeot (FR-19)
54 Pfizer (US-27)
715 Phelps Dodge (US-286)
339 Philadelphia Electric (US-133)
17 Philip Morris (US-6)
472 Philips Electronics (NE-5)
261 Phillips Petroleum (US-96)
571 Pioneer Electronic (JA-163)
966 Pioneer Hi-Bred International (US-390)
329 Pitney Bowes (US-127)
543 Placer Dome (CA-13)
287 PNC Bank (US-110)
529 Polygram (NE-8)
755 Potomac Electric Power (US-308)
528 PowerGen (BR-48)
273 PPG Industries (US-104)
945 Premier Industrial (US-381)
678 Preussag (GE-24)
266 Primerica (US-101)
368 Procordia (SWE-3)
22 Procter & Gamble (US-9)
908 Promodès (FR-40)
721 Promus (US-290)
973 Proton (MA-7)
209 Prudential (BR-24)
989 Prysmian (IT-[illegible])
260 Public Service Enterprise Group (US-95)
422 Quaker Oats (US-165)
927 QVC Network (US-373)

R

454 Ralston-Purina (US-180)
663 Rank Organisation (BR-61)
585 RAS (IT-8)
286 Raytheon (US-109)
445 Reader's Digest Association (US-174)
684 Reckitt & Colman (BR-62)
628 Redland (BR-57)
701 Reebok International (US-279)
186 Reed Elsevier (NE/BR-NR)
NR Reed International (BR-37)
784 Rentokil Group (BR-71)
277 Repsol (SP-3)
876 Republic New York (US-357)
546 Resorts World (MA-3)
219 Reuters Holdings (BR-25)
846 Reynolds Metals (US-347)
342 Rhône-Poulenc (FR-15)
299 Rhône-Poulenc Rorer (US-115)
496 Ricoh (JA-149)
345 RJR Nabisco Holdings (US-137)
998 RMC Group (BR-92)
24 Roche Holding (SWI-1)
318 Rockwell International (US-121)
590 Rohm & Haas (US-239)
357 Rothmans International (BR-34)
305 Royal Bank of Canada (CA-5)
652 Royal Bank of Scotland Group (BR-59)
NR Royal Dutch Petroleum (NE-1)
3 Royal Dutch/Shell Group (NE/BR-NR)
798 Royal Insurance Holdings (BR-74)
174 RTZ (BR-21)
444 Rubbermaid (US-173)
153 RWE (GE-6)

S

641 Safeco (US-263)
986 Sagami Railway (JA-278)
129 Sainsbury (J.) (BR-15)
15 Sakura Bank (JA-9)
576 Sallie Mae (US-235)
574 Salomon (US-233)
768 San Diego Gas & Electric (US-314)
93 Sandoz (SWI-4)
635 Sandvik (SWE-6)
229 Sankyo (JA-77)
747 Sante Fe Pacific (US-304)
10 Sanwa Bank (JA-5)
254 Sanyo Electric (JA-84)
693 Sapporo Breweries (JA-195)
146 Sara Lee (US-64)
965 Sato Kogyo (JA-273)
173 SCEcorp (US-71)
664 Schering (GE-23)
131 Schering-Plough (US-59)
96 Schlumberger (US-46)
443 Schweiz. Rück (SWI-9)
860 Scott Paper (US-351)
564 Scottish Power (BR-50)
791 Scottish & Newcastle Breweries (BR-72)
172 Seagram (CA-1)
961 Sears (BR-88)
76 Sears, Roebuck (US-38)
354 Secom (JA-110)
127 Seibu Railway (JA-40)
851 Seino Transportation (JA-236)
785 Seiyu (JA-220)
469 Sekisui Chemical (JA-143)
291 Sekisui House (JA-94)
65 Seven-Eleven Japan (JA-22)
753 7-7 Bank (JA-211)
839 Severn Trent (BR-76)
141 Sharp (JA-45)
956 Shaw Industries (US-386)
673 Shell Canada (CA-17)
NR Shell Transport & Trading (BR-2)
838 Sherwin-Williams (US-344)
278 Shikoku Electric Power (JA-89)
312 Shimizu (JA-100)
421 Shin-Etsu Chemical (JA-136)
671 Shionogi (JA-190)
415 Shiseido (JA-134)
190 Shizuoka Bank (JA-62)
605 Showa Denko (JA-174)
649 Showa Shell Sekiyu (JA-185)
817 Siebe (BR-75)
61 Siemens (GE-2)
940 Sigma-Aldrich (US-379)
946 Silicon Graphics (US-382)
794 Sime Darby (MA-6)
402 Singapore Airlines (SI-1)
258 SIP (IT-3)
503 SMH (SWI-11)
981 Smith & Nephew (BR-90)
75 SmithKline Beecham (BR-8)
909 Snow Brand Milk (JA-255)
235 Société Générale (FR-8)
581 Société Générale de Belgique (BE-3)
629 Society (US-255)
802 Solvay (BE-7)
874 Sonat (US-356)
99 Sony (JA-30)
488 Sony Music Entertainment (JA-147)
138 [illegible]
996 [illegible]
599 Southwest Airlines (US-243)
56 Southwestern Bell (US-29)
164 Sprint (US-69)
845 Standard Chartered (BR-77)
959 State Street Boston (US-387)
228 STET (IT-2)
819 Stora Kopparbergs Bergslags (SWE-8)
670 St. Paul (US-271)
7 Sumitomo Bank (JA-3)
285 Sumitomo Chemical (JA-93)
239 Sumitomo Corp. (JA-79)
270 Sumitomo Electric Industries (JA-87)
843 Sumitomo Heavy Industries (JA-233)
355 Sumitomo Marine & Fire (JA-111)
184 Sumitomo Metal Industries (JA-60)
440 Sumitomo Metal Mining (JA-138)
774 Sumitomo Realty & Development (JA-216)
105 Sumitomo Trust & Banking (JA-32)
836 Sun (US-343)
568 Sun Alliance & London Insurance (BR-51)
200 Sun Hung Kai Properties (HK-4)
758 Sun Microsystems (US-309)
409 SunTrust Banks (US-160)
933 Supervalu (US-376)
610 Suzuki Motor (JA-175)
767 Svenska Cellulosa Aktiebolaget (SWE-7)
248 Swire Pacific (HK-6)
221 Swiss Bank Corp. (SWI-7)
926 SynOptics Communications (US-372)
498 Syntex (US-201)
456 Sysco (US-182)

T

322 Taisei (JA-104)
336 Taisho Pharmaceutical (JA-108)
910 Takashimaya (JA-256)
166 Takeda Chemical Industries (JA-57)
501 TDK (JA-150)
867 Teco Energy (US-355)
537 Teijin (JA-155)
993 Teikoku Oil (JA-280)
202 Tele-Communications (US-78)
606 Telecom Corp. of New Zealand (NZ-1)
188 Telefónica Nacional de España (SP-1)
155 Telekom Malaysia (MA-1)
902 Temple Inland (US-365)
168 Tenaga Nasional (MA-2)
256 Tenneco (US-94)
320 Tesco (BR-30)
90 Texaco (US-45)
416 Texas Instruments (US-162)
191 Texas Utilities (US-73)
509 Textron (US-206)
738 Thames Water (BR-68)
308 Thomson (CA-6)
691 Thomson-CSF (FR-26)
403 Thorn EMI (BR-38)
714 Thyssen (GE-25)
955 TI Group (BR-86)
125 Time Warner (US-57)
572 Times Mirror (US-232)
937 TJX (US-377)
328 Tobu Railway (JA-106)
888 Toho Co. (JA-247)
889 Toho Gas (JA-248)
118 Tohoku Electric Power (JA-38)
49 Tokai Bank (JA-18)
74 Tokio Marine & Fire (JA-24)
934 Tokyo Broadcasting System (JA-263)
695 Tokyo Dome (JA-197)
16 Tokyo Electric Power (JA-10)
579 Tokyo Electron (JA-166)
117 Tokyo Gas (JA-37)
588 Tokyo Steel Mfg. (JA-170)
207 Tokyu Corp. (JA-69)
782 Tokyu Land (JA-218)
880 Tomen (JA-243)
615 Tomkins (BR-55)
241 Tonen (JA-80)
255 Toppan Printing (JA-85)
237 Toray Industries (JA-78)
589 Torchmark (US-238)
536 Toronto-Dominion Bank (CA-12)
59 Toshiba (JA-21)
944 Tosoh (JA-267)
316 Tostem (JA-103)
214 TOTAL (FR-7)
365 Toto (JA-115)
376 Toyo Seikan Kaisha (JA-118)
222 Toyo Trust & Banking (JA-74)
842 Toyobo (JA-232)
479 Toyoda Automatic Loom Works (JA-144)
13 Toyota Motor (JA-8)
158 Toys 'R' Us (US-66)
591 Tractebel (BE-4)
586 Transamerica (US-237)
882 TransCanada Pipelines (CA-20)
552 Travelers (US-223)
666 Tribune (US-268)
538 TRW (US-218)
514 TSB Group (BR-45)
557 Turner Broadcasting System (US-227)
634 Tyson Foods (US-258)

UVW

925 U.S. Bancorp (US-371)
420 U.S. Healthcare (US-164)
706 UAL (US-282)
647 Ube Industries (JA-183)
26 Unilever (NE/BR-NR)
NR Unilever NV (NE-2)
NR Unilever PLC (BR-16)
89 Union Bank of Switzerland (SWI-3)
739 Union Camp (US-299)
844 Union Carbide (US-346)
238 Union des Assurances de Paris (FR-9)
555 Union Electric (US-225)
143 Union Pacific (US-63)
705 United Biscuits (Holdings) (BR-66)
558 United Healthcare (US-228)
854 United Overseas Bank (SI-4)
338 United Technologies (US-132)
997 Unitrin (US-402)
280 Unocal (US-106)
544 UNUMPROVIDENT (BR-[illegible])
873 Uny (JA-242)
434 Upjohn (US-171)
81 US West (US-40)
348 UST (US-139)
417 USX-Marathon Group (US-163)
887 USX-U.S. Steel Group (US-362)
169 VEBA (GE-8)
659 Vereinigte Elek. Westfalen (GE-22)
733 VF (US-295)
381 Viacom (US-150)
602 VIAG (GE-20)
912 Victor Co. of Japan (JA-257)
974 Victoria Holding (GE-32)
325 Vodafone Group (BR-31)
347 Volkswagen (GE-12)
533 Volvo (SWE-5)
358 Wachovia (US-141)
8 Wal-Mart Stores (US-4)
426 Walgreen (US-167)
936 Warburg (S.G.) Group (BR-83)
199 Warner-Lambert (US-77)
805 Washington Post (US-325)
604 Waste Management International (BR-53)
185 Wellcome (BR-23)
383 Wells Fargo (US-151)
623 Western Mining (AS-9)
424 Westinghouse Electric (US-166)
521 Westpac Banking (AS-7)
218 Weyerhaeuser (US-83)
379 Wharf (Holdings) (HK-8)
627 Wheelabrator Technologies (US-254)
607 Whirlpool (US-246)
689 Whitbread (BR-64)
990 Williams (US-399)
953 Williams Holdings (BR-85)
522 Winn-Dixie Stores (US-213)
667 Winterthur (SWI-12)
828 Wisconsin Energy (US-339)
86 WMX Technologies (US-43)
921 Wolseley (BR-82)
779 Wolters Kluwer (NE-11)
603 Woolworth (US-245)
922 World International Holdings (HK-20)
553 Wrigley (Wm.) Jr. (US-224)

XYZ

296 Xerox (US-114)
832 Yakult Honsha (JA-230)
196 Yamaichi Securities (JA-65)
298 Yamanouchi Pharmaceutical (JA-96)
770 Yamato Transport (JA-214)
583 Yamazaki Baking (JA-169)
297 Yasuda Fire & Marine (JA-95)
216 Yasuda Trust & Banking (JA-72)
992 Yokogawa Electric (JA-279)
497 Z-Landerbank Bank Austria (AT-1)
304 Zurich Vers. (SWI-8)

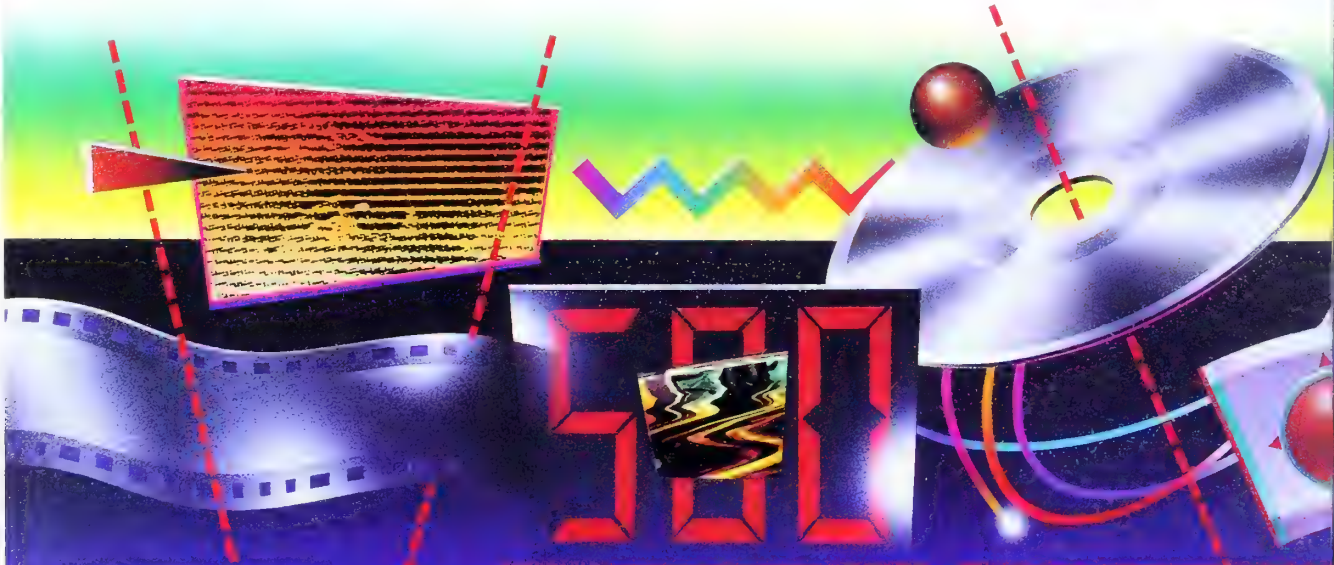
MEDIA MANIA

THE SCRAMBLE FOR DIGITAL TECHNOLOGY IS ON. HERE'S A CAUTIONARY VIEW

Digital technology may be the greatest leap forward in communications since the invention of the transistor. Or it may just be a way to sell more costume jewelry on cable TV. Visit Barry Diller in the sun-drenched cabana behind his Beverly Hills home, and you'll probably end up betting on the baubles.

For seven months, Diller has been running the QVC home-shopping network. Now, as he reflects on his foray into interactive television, Diller appreciates both the possibilities and limits of his business. On the TV screen next to his desk, QVC is busily hawking quilted bedspreads, and Diller knows he will sell tons of them. He can't say the same for many of the proposals coming from oth er multimedia players: "I'd hate to b the companies who are throwing billion at this stuff," he says.

Diller's is one of the few sober voice in a giddy chorus. Digital, interactive multimedia. Whatever you call it, th next big technology is here. And th communications industry has embarke



PLACING BETS ON THE MULTIMEDIA FUTURE

TIME WARNER

STRATEGY

Most aggressive player in the race to provide multimedia services. Will spend $5 billion in partnership with U.S. West to upgrade its cable network with fiber-optic wire and interactive technology by 1998. Rushing into an array of deals such as an interactive video-game channel with Tele-Communications and Sega.

WILL IT WORK?

Powerful programming assets at Warner Bros. and Home Box Office give it a head start. But its big wager on multimedia could come up short if consumers aren't interested or refuse to pay the price. Company's $16.3 billion in debt only magnifies the risk.

TELE-COMMUNICATION

Nation's largest cable operator is righ behind Time Warner in the multimedia Spending $2 billion to lay fiber-optic v its cable systems. But so far holding of more exotic and costly interactive technology. Spun off Liberty Media as separate programming company, with CEO John Malone as chairman.

Malone's 10.2 million subscribers giv a huge captive market for new interac services. Also controls plenty of progr ming through Liberty. But the FCC ma force him to choose between cable sy and programming as early as Octobe

the noisiest gold rush since the forty-
ners left for San Francisco with pans
nking. It's not just media companies,
ther: Computer makers and telephone
mpanies are scrambling to get into
e digital derby. All of them sense a
ance to reinvent home entertainment
d information services.

For media companies, the stakes are
pecially huge. They could be the linch-
n of an industry that Apple Computer
e. Chairman John Sculley estimates
ll be worth $3 trillion by the turn of
e century. Or if multimedia falls short,
e true believers could lose their shirts,
t to mention their rank among leading
merican media companies. Already, the
ndscape is shifting as the major play-
s jockey for position in this brave new
edia world (table).

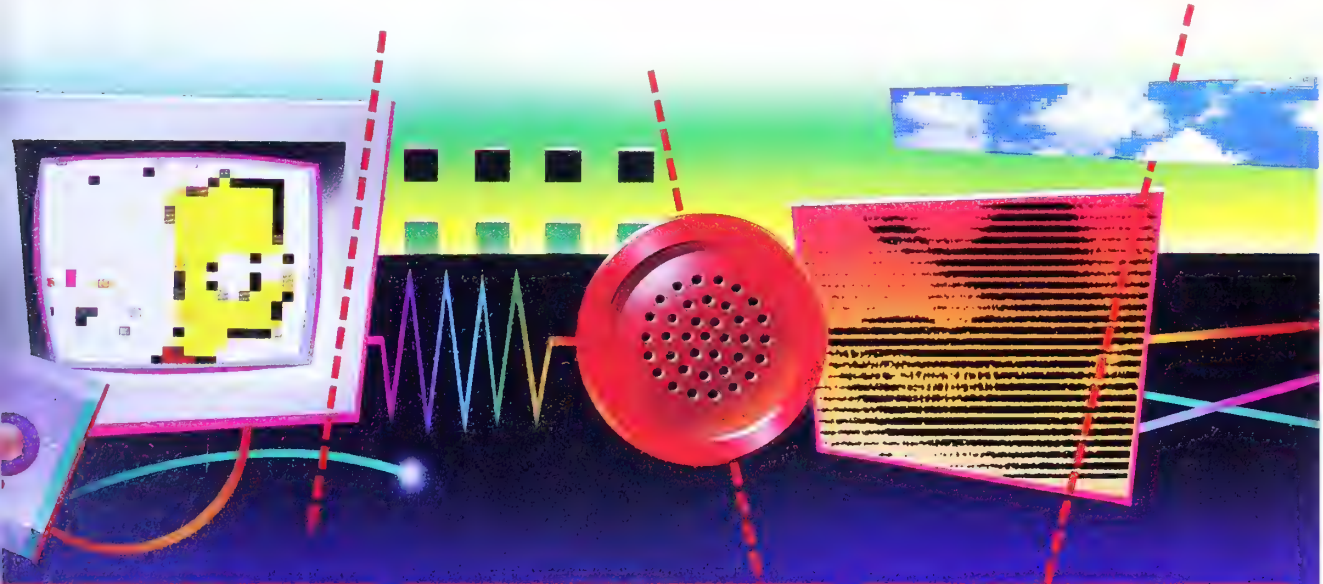
What is digital technology, and why is
so tantalizing? Simply put, by con-
rting words and pictures into digital
rm, programmers can send far more of them over wires and into TV sets. Suddenly, couch potatoes could receive 500 or even 50,000 channels. Digital technology also allows viewers to send messages back up the line. Where once you tuned in passively to *60 Minutes* or *Roseanne*, you'll now be able to interact with the tube. This opens the door to a dizzying array of TV services: home shopping and banking, long-distance learning, video games, even telephone service.

THE TRUE BELIEVERS COULD WIN BIG—OR LOSE THEIR SHIRTS

IMPULSE MACHINES. Television looks very different on this information highway. Forget about the cheesy ambiance of QVC. Future home-shopping channels could offer a video mall of stores, where you try out the merchandise on electronic mannequins. Don't worry about waiting in line for concert tickets, either. MTV could get you a seat for a show even as you watch the performer's music video. Wondering about a batter's statistics during a game? At the touch of a button, ESPN could flash them on the screen. You can still watch *Roseanne*, of course, but now you can select the time.

It's a grand vision, and one that lends itself to grandiloquence: "When I turn on my television, I'll be able to switch to anything, anywhere," says Gerald M. Levin, chairman of Time Warner Inc., the world's largest media company and most aggressive multimedia player. "It's not just a Time Warner dream. It's a ubiquitous notion."

Maybe. But first, Time Warner and other cable companies must pay a king's ransom to upgrade their networks. Edward D. Horowitz, senior vice-president of cable programmer Viacom Inc., fig-

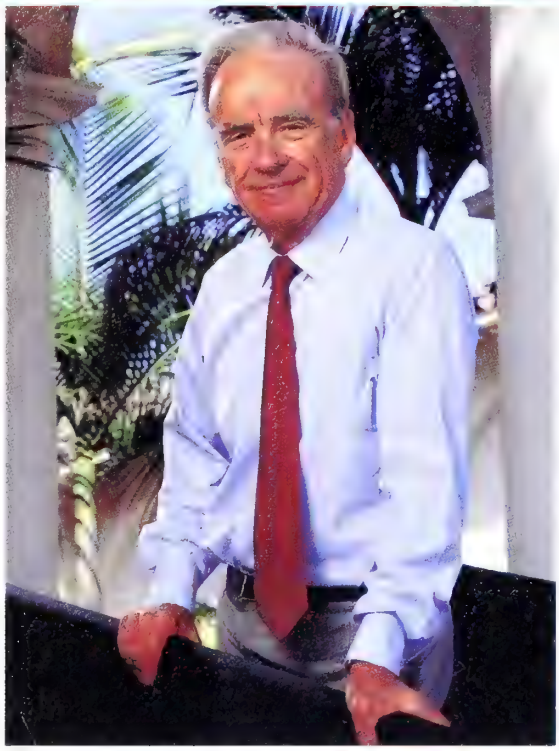


NEWS CORP.	SONY	WALT DISNEY
omer to cable, intends to mine its Fox o for movies and television shows for per-view. CEO Rupert Murdoch thinks media will be limited to movies and active video games. Co-owns Request per-view TV service with TCI. loping on-screen TV Guide, and just d Fox Cable network.	Developing interactive video games based on *Last Action Hero* and other films for Sega cable channel. Developing multimedia educational products such as Data Discman. Also starting TV game-show cable channel with limited interactivity, featuring gems such as *Jeopardy* and *Wheel of Fortune*.	Eschewing multimedia technology in favor of programming. Recent purchase of Miramax studio makes it the dominant producer in Hollywood. Content to license its library of *Aladdin* and educational films for multimedia use. CEO Micheal Eisner would like consumers to leave their TV sets more to visit his theme parks.
loch's Fox network and studio give him tamming strength. Finally getting a nce in cable. But Fox Cable is no match me Warner or TCI, while his o can't beat Warner Bros. Will do O.K. timedia remains a limited business.	Huge Columbia studio library gives Sony heft. But lack of cable distribution could handicap it in multimedia services. Growth of interactive television viewing may eventually erode sales of Sony products such as the Walkman or MiniDisc.	Eisner's conservative approach probably can't miss. Will avoid losses if multimedia flops. And its programming muscle will stand it in good stead even if multimedia succeeds. But it may come to miss its lack of entrée into interactive services.

ures his industry will have to spend a staggering $36 billion to create the infrastructure for interactive communications. Telephone companies face a similarly gigantic outlay.

The trouble is, a good chunk of this money has to be spent without knowing whether consumers really want all these services. Or whether they'll be willing to pay for them.

To be sure, business, professional, and educational markets are already emerging. One early advantage: They are less price-sensitive than consumer markets. That's why media companies ranging from Time Warner and Washington Post Co. to McGraw-Hill Inc., publisher of BUSINESS WEEK, are already selling electronic versions of their magazines, books, and data bases.



RUPERT MURDOCH
NEWS CORP.
HE HAS VAST RESOURCES, BUT HE THINKS MULTIMEDIA IS "A BIT OF A HYPE"

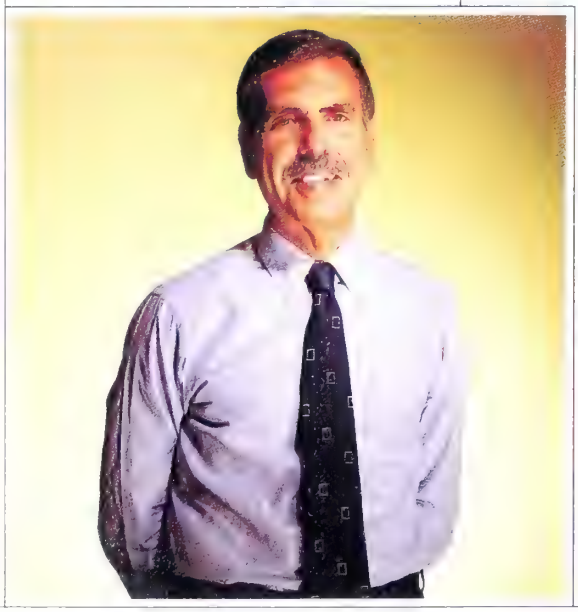
The billions, though, are being spent on entertainment. And that raises a host of questions: Who will supply the thousands of movies and sitcoms to fill the channels? If consumers won't pay full freight, how will the industry finance itself? How does advertising, which has funded most U. S. media for the past century, fit in this new scheme? With audiences fragmenting ever further, and with interactivity giving viewers ever more choice over what to watch—and what not to watch—the conventional commercial seems hopelessly outmoded. But Madison Avenue isn't at all sure how to replace it (page 118).

GANGING UP. So far, the digital race has been mostly a dash for technology. The cable companies need sophisticated computer hardware and software to support interactivity. So they have spun a bewildering web of alliances with computer and telephone companies. Time Warner struck a $2.5 billion alliance with U. S. West Inc., while it is also collaborating with Tele-Communications Inc. to set standards for interactive software. Media industry types call this "convergence." That means the players are swapping programming, gadgetry, and expertise in arcane matters such as digital switching.

GERALD LEVIN
TIME WARNER
HIS FONDEST DREAM IS TO OWN THE PIPELINE AS WELL AS THE PROGRAMMING

It all makes for a mating dance of gargantuan proportions. Trade newsletter *Digital Media* has counted up no fewer than 348 alliances in pursuit of multimedia services. Many are interlocking, some are overlapping, and only a few qualify for the breathless press coverage most have received. Among those who travel the New York-Hollywood-Silicon Valley axis, the phrase "everybody is talking to everybody" has already become a cliché.

As handshakes by newlywed partners become old news, media executives are finally grappling with the tougher questions. Many insist multimedia will pay for itself by eating into other lucrative markets. People spend $16 billion a year to rent home videos, $6 billion on video games, $80 billi through catalog and $80 billion f local phone se vice. If multimed can just nibb away at thes markets, the r turns will easi justify the investment. Says Geoffre W. Holmes, Time Warner's senior vic president for technology: "We're n asking people to do something diffe ent, just in a more convenient way."



Yet even some media pioneers e press skepticism. Ted Turner, whose C ble News Network Inc. transformed t industry, thinks consumers aren't rea for exotic services: "The fact is, ever interactive cable experiment so far h failed," he declares. "Maybe in anoth generation it will work." Turner and ot ers remember Qube, an unsuccessful e fort at interactive TV that Warner Co munications Inc. and American Expre Co. started in 1976. Rupert Murdoc whose Fox Broadcasting Co. successfu ly challenged the Big Three network thinks consumers will balk at the pric "People may pay $20 for basic cable he says. "But are they going to spe $60 to $70 to have interactive service I think it's very doubtful."

Nor are those who might be wipe out by multimedia exactly quaking. N more than 20% of households will b outfitted for fully interactive service b the year 2000, predicts H. Wayne H izenga, chairman of Blockbuster Ente tainment Corp., the home-video chai "It gives the appearance of movi quickly, but it will be a long time befo the average family has it," he says.

So far, the evidence on multimedia decidedly mixed. Time Warner offe rudimentary interactive se vices, including movies, ov its cable system in Queen N.Y. The company says it pleased with the respons though it dropped the pri of the movies from $4. to $3.95 after subscribe balked.

Groupe Videotron offe interactive news and spor programming, plus vid games and information se vices to 220,000 subscribe in eastern Canada. Amo other things, viewers can s lect camera angles on spo ing events. Videotron says more than doubled its nu ber of interactive subscri ers from 1990 to 1993, thou the service still reaches on 27% of its total audience.

niversity of Montreal udy commissioned by e company estimates at the interactive ervices led subscrib- s to watch two more ours of TV per week. ut the study also und that viewers ickly became impa- ent with the limited ferings.

Jones International as offered interactive ducational courses nce 1987 via satellite roadcast and cable. lthough the service, lled Mind Extension niversity, gives view- s a chance to earn egrees from Colorado tate and George ashington univer- ties, it has only ,000 subscribers out a possible audience 23.5 million house- olds. CEO Glenn R. ones doesn't expect turn a profit for vo more years.

Finally, Daniels Ca- evision and GTE orp. teamed up last ecember to offer ome shopping and deo games to resi- ents of Carlsbad, Cal- , for $9.95 on top of eir average $22.95 monthly cable bill. far, they have signed up just 2,000 ibscribers—4% of Daniels' total Carls- id audience. One problem: The service oesn't offer pay-per-view movies.

That cuts to the heart of the debate er multimedia. In one camp are media xecutives who perceive interactive TV little more than a glorified pay-per- ew service offering more channels, lots movies, and some games. They re- ard multimedia as a way to squeeze extra buck out of their existing pro- amming. In the other camp are those ho believe that new, as yet undefined, ultimedia services will be a distinct id potentially huge market.

Five powerful media companies have aked out radically different positions ong this spectrum: Time Warner, Tele- ommunications, News Corp., Sony, and alt Disney. To be sure, what they say this issue is often a function of their vn strengths and weaknesses. But the oguls who run these companies are ome of the industry's most prescient id influential thinkers. Their strate- es offer an early glimpse of what the ew media landscape may look like.

For true believers, you can't beat Time Warner. It's building the nation's first fully interactive cable system, in Orlando, due to begin service early next year. It struck the first big alliance with a phone company, U. S. West, to upgrade its cable systems by 1998. And it is spending more money—$4 billion of its own plus $1 billion from U. S. West—than anyone else.

JOHN MALONE
TELE-COMMUNICATIONS
TO GET MORE PROGRAMS, MALONE MAY BE STALKING A STUDIO

Time Warner's Levin says owning the pipeline as well as the programming will help him pioneer multimedia services. With properties from Bugs Bunny to *Money* magazine, Time Warner could develop many new offerings. Already, it is teaming up with Tele-Communications and Sega to start an interactive video game channel that could draw on Warner Brothers' films such as *Batman*. By building the network with U. S. West, Levin thinks Time Warner can exploit its assets faster than rivals.

ALL FLASH? Skeptics say Time Warner's strategy is still compromised by its debt burden. Levin sold U. S. West a 25% stake in the Warner studio, Home Box Office Inc., and a cable system with 7.1 million subscribers. In addition to the $1 billion for the new system, the phone company gave Time Warner $1.5 billion to pare down its $16 billion debt.

Sounds like a good deal. But some argue that Levin effectively traded 25% of his crown jewels for technical expertise that Time Warner could easily have bought elsewhere. "The deal solidifies Time Warner's status as a player," says John Tinker, a media analyst at Furman Selz Inc. "But that doesn't mean it benefits shareholders."

Shareholders might ponder something else, too. During the 1992 campaign, President Clinton declared that he wanted to make the information highway part of the nation's infrastructure, much like the interstate highway system. Given that—and the huge cost of building these networks—most media executives expect that over the long term, they will become common carriers like telephone lines. That would open them up to stiff regulation. Running a public utility is far less appealing than an unregulated monopoly.

Levin insists, however, that owning the system that carries its programming will give Time Warner an edge over rival programmers such as Sony or Disney. "I want to deliver every movie ever made, not just every Warner Brothers movie," he says.

At Time Warner's archrival, Tele-Communications, this issue resonates even more strongly. TCI's clout derives almost entirely from its 10.2 million subscribers, a huge potential audience for interactive services. And John C. Malone, TCI's ambitious chief executive, is only one step behind Levin in the digital derby. TCI is spending $2 billion to lay fiber-optic cable throughout its system, though Malone is holding off on the more exotic sort of multimedia technology Time Warner is using in Orlando.

Malone has two problems: programming and regulations. In contrast to Time Warner, TCI and its sister company, Liberty Media Corp., own just a se-

JEFFREY OWEN/ONYX

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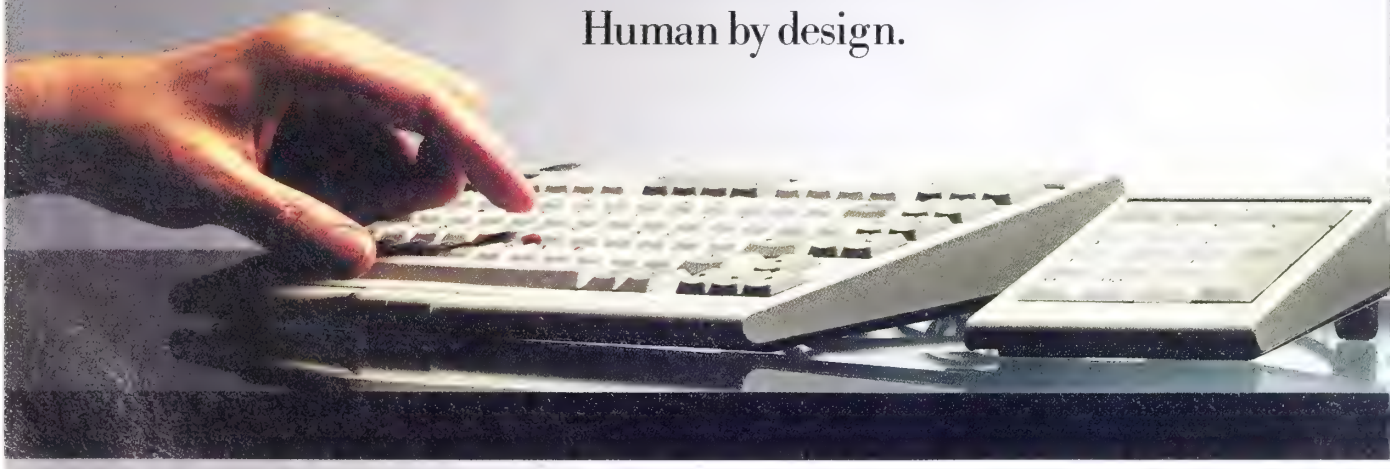

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ries of minority stakes in cable networks: 22% of Turner Broadcasting System Inc., 18% of Black Entertainment Television Inc., and so forth. Malone isn't talking. But rival executives say he is working to fix that shortcoming. For example, Liberty has a 30% stake in QVC and controls archrival Home Shopping Network Inc. Competitors expect Malone will soon merge the two as the platform for a home-shopping empire.

HOLLYWOOD HOPEFUL. To become a true programming power, Malone needs a Hollywood studio. He already pumped $90 million into Carolco Pictures for four films that TCI will show on pay-per-view before their theatrical release. And rumors have him mulling over a bid for Paramount Communications Inc., maybe with Ted Turner. That would certainly typify the promiscuous dealmaking of the multimedia age. "Any time you go into uncharted waters, there is a desire to latch on to someone to make things more certain," says Frank J. Biondi Jr., CEO of Viacom.

MICKEY SCHULHOF
SONY OF AMERICA
MULTIMEDIA MAY ACTUALLY EAT INTO SONY'S CONSUMER-ELECTRONICS SALES

Trouble is, the Federal Communications Commission may soon limit the number of cable networks in which an operator can own equity. That could force Malone to sever ties between TCI and Liberty, both of which he now controls. If he is forced to choose which company to focus on, Malone will opt for Liberty, observers believe, where most of his estimated $600 million personal fortune is tied up. After building the structure for interactive TV, Malone could then reap its benefits by emphasizing programming, while leaving TCI, where regulations may well cramp his future.

Rupert Murdoch doesn't lack for programming. His News Corp. owns the Twentieth Century Fox film studio and the Fox TV network. Nor does he lack in dealmaking skills. The problem is, Murdoch thinks that multimedia "is a bit of a hype." True, he believes technology will boost the number of broadcast and cable channels from 40 to about 100. That's why he recently teamed up with Malone to start a Fox

WHAT THE MONEY-RUNNERS ARE CHASING

Wall Street often swoons over "concept" stocks, and multimedia—the combination of computers, telecommunications, audio, and video into a powerful system in every home—is one heck of a concept. No matter that years will pass before profits will be made. Investors are clamoring. "You can take some comfort in the fact that some very smart people—Rupert Murdoch, Barry Diller, and Sumner Redstone—are getting into this business with their own wealth on the line," says Larry Haverty of State Street Research & Management Co., referring to the chairmen of News Corp., QVC Network, and Viacom, respectively.

Most companies that will be leaders in multimedia are already players in software, entertainment, or telecommunications. Pure plays—companies whose whole business is multimedia—are rare. That explains why brand-new 3DO Co. is a sizzler. Its *raison d'être* is to develop hardware and software systems for multimedia—and to set a standard that all others will have to follow.

Demand for 3DO's initial public offering in early May was so strong that the underwriters bumped the price to $15 from the original $10 to $12 range. Since then, the stock has run as high as 37, but now trades at 27¾. Others that are building gadgetry include General Instrument, Scientific-Atlanta, and Silicon Graphics.

But some pros are wary of hardware, since overproduction and obsolescence can wipe out profits. Timothy L. Miller, who runs INVESCO Funds Group Inc.'s Financial Strategic Leisure portfolio, prefers companies "with good copyrights and great programming," such as Walt Disney or Viacom in programming and Acclaim Entertainment, Broderbund Software, or Electronic Arts in video-game software.

These companies are also attractive because they're not betting on the success of any one format. That's important since the dominant delivery system may not be determined for years. "Whatever the medium of choice—cable TV, telephone lines, or CD-ROM, these companies can deliver their product," says analyst Betty Lyter of Montgomery Securities Inc.

Among the up-and-comers is NTN Communications Inc., which offers interactive programming. Fidelity Investments has a 9.5% stake. Another is America Online Inc., whose news and information service is delivered via modem. "If you look at the company as it is today, it's not cheap," says Steven L. Eskenazi of Alex. Brown & Sons Inc. At 35½, it sells for 36 times calendar 1994 earnings. But he says AOL could easily adapt its service for the millions of customers that cable-TV or phone-based systems will eventually reach. That multimedia concept could translate into multimillions.

By Jeffrey M. Laderman in New York

INVESTING IN MULTIMEDIA

Stock	Recent price	52-week high-low
HARDWARE		
GENERAL INSTRUMENT	38⅛	41⅛–11½
SCIENTIFIC -ATLANTA	31⅞	35–15¼
SILICON GRAPHICS	37	38½–16⅝
3DO	27¾	37¼–18½
SOFTWARE		
ACCLAIM ENTERTAINMENT	29⅝	29⅞–5¾
AMERICA ONLINE	35½	39¾–12
BRODERBUND SOFTWARE	39⅛	50¼–18½
ELECTRONIC ARTS	29¾	38½–10⅛
PROGRAMMING		
GAYLORD ENTERTAINMENT	45½	45¾–28
NTN COMMUNICATIONS	7⅝	11½–2⅞
QVC NETWORK	64½	73–16¼
VIACOM	51⅛	52⅝–28⅛

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Cable network. It is a classic marketing strategy: Extend your brand name to compete in a more crowded media marketplace.

As for the original home of Bart Simpson, Murdoch believes the Fox network will fare O. K. For that matter, so will CBS, ABC, and NBC. Any new services, Murdoch says, will either be very narrowly targeted or supported by transactions such as home shopping or pay-per-view movies. As a result, the networks will remain the last redoubt for mass marketers selling consumer products to a mass audience.

ZERO-SUM GAME? Some executives take this argument further. Even with a reduced audience share, they say, the Big Three and Fox will still be the only places to generate mass appeal for entertainment programs. "What will they do for programming if there aren't networks to start with?" asks Laurence A. Tisch, chairman of CBS Inc. In effect, the networks could end up as vital marketing arms for multimedia.

Michael P. Schulhof of Sony Corp. of America also preaches the virtues of old-fashioned mass media. That may seem odd, given that Schulhof runs the U. S. arm of a Japanese electronics company that usually pioneers change. But Sony finds itself in a slightly contradictory position. It is using digital technology in everything from its MiniDisc to the soundtrack for *Last Action Hero*, the latest release from its Columbia Pictures studio. But Sony is a peripheral player in multimedia television, aside from the fact that it makes TV sets. What's more, insofar as it succeeds, multimedia could actually hurt sales of Sony's consumer-electronics products, according to Nancy B. Peretsman, a managing director of Salomon Brothers Inc.

The more consumers invest in multimedia software and hardware, she says, the less they'll have for MiniDiscs. Schulhof insists it's not a zero-sum game. Indeed, he has placed a few multimedia bets of his own: Sony will soon launch an interactive game-show channel using phones and featuring popular shows such as *Jeopardy* and *Wheel of Fortune*.

While Schulhof says he welcomes multimedia, Michael D. Eisner is quite vocal in his uneasiness. It's not that the chair man of Walt Disney Co. worries about his company. Disney is the most pro digious entertainment programmer in America. With its estimated $60 million acquisition of Miramax Film Corp., Dis ney studios will soon churn out a stun ning 60 films per year. The company's video libraries contain 250 movies and 530 cartoons, everything from *Aladdin* to *The Crying Game*. In an era in which good programming will be at a premium Eisner could clean up. So confident is Disney of the appeal of Mickey Mouse & Co. that it has so far largely ignored multimedia.

What bothers Eisner is the notion that thousands of new channels will somehow improve television. Speaking at a recent trade show, he declared: "A real nightmare is finding out that the superhighway has turned into a detour and that we're stuck with 25 versions of *The Amy Fisher Story*." Multimedia, he says, could yield a nation where few people venture from their TV sets to sample the real world.

Between Eisner's disdain and Levin's

WILL THE INFORMATION HIGHWAY BYPASS MAD AVE.?

Tired of all the hoopla about multimedia? Head for Madison Avenue. You will hear blissfully little about the digital revolution in the bastions of American advertising. Normally voluble ad executives clam up when asked to define their role in the new media landscape. "There's a certain sensitivity about talking about things you can't deliver," says Allen Rosenshine, chairman of BBDO Worldwide.

His comment symbolizes advertising's struggle with multimedia. Most agencies still make their millions by producing brief TV commercials for a mass audience of viewers with relatively few choices. Give every one of those people a remote control and a much broader array of options, and you have a recipe for marketing mayhem. Asks McCann-Erickson Worldwide Media Director Ira Carlin: "How do we make advertising attractive enough so that consumers will select it?"

The answer: You probably can't, unless the nature of advertising changes dramatically. And so far, agencies aren't really motivated to try. The four broadcast networks booked $10.3 billion worth of advertising in 1992. That compares with just $1.6 billion for all of cable. Interactive services such as Prodigy and America Online do feature ads from marketers such as Honda and Microsoft. But agencies still perceive such campaigns as supplemental. Only now are BBDO and other shops even assigning staffers to study multimedia. The pace has been so slow that Time Warner Inc. will begin a road show in early July to raise the awareness of the industry.

If Time Warner feels more urgency than the agencies, it's because the com-

BELL ATLANTIC'S HALF-HOUR, SITCOM-STYLE INFOMERCIAL FEATURES THE "RINGER" FAMILY

pany knows it will need advertisin underwrite some of its multim dreams. Consumers simply won't be ing or able to pay the cost of ev thing they watch. So media compa are likely to offer some movies or services at a cheaper price, but commercials. You may be able to *Jurassic Park* for $2.95 instead of $ But you'll get a Donald's *Jurassic* promotion tacked

Futurists see i guing new app tions. Don Peppe marketing consu who specializes in media, says vie may be assigne video mailbox that they can use to information services or, say, last w episode of *Murphy Brown*. In retur sending you these services, the com that maintains the mailboxes will the right to give your name to a lin number of advertisers, who then messages in your box.

PRIVACY ALERT. The advertising w be precisely targeted because the co ny will have compiled a data bank b on your viewing habits. Clearly, promotional practices will raise pri issues. Even traditional mass ma ers, however, say the ability to aim

vangelism, it's ard to tell hether multi- edia is a boon a boondoggle. ither way, it ill propel the edia into an a of dramatic hange. One wild card is technology mpanies: If American Telephone Telegraph, Apple, and others are rious about multimedia, they will eed programming. The easiest way get it is to buy studios or net- orks. "We all laughed when the apanese paid $6 billion for a Holly- ood studio," says Murdoch. "But very shrewd investor said to me ecently: 'Watch the telephone compa- ies. That's the next wave.'"

MICHAEL EISNER WALT DISNEY HE FEARS THE DIGITAL HIGHWAY WILL BRING THE SAME OLD FARE–JUST MORE OF IT

AUTIOUS NEWSPAPER. Also uncertain is ow far multimedia will extend beyond ovies and video games. Paramount, iacom, and others are selling interac- ve educational products. For now, those se primarily CD-ROM technology: aramount's *Amazonia*, for example, uts children in a tropical rain forest nd allows them to interact with plants and animals. McGraw-Hill offers its *Multimedia Encyclopedia of Mammalian Biology*, complete with video and sound. At the moment, Paramount estimates this market is worth $400 million.

The same goes for information services. New York Times Co. is quick to say that its recent acquisition of *The Boston Globe* gives the company an expanded data base for future electronic delivery of news. But the Times is hanging back on specific ventures. Times President Lance R. Primis says he will focus on the business market, which could fetch higher prices than the consumer market.

Most important, nobody knows just what role Washington will play. After his early remarks, Clinton has been silent on the subject. Some proponents of the information highway complain that the cable industry has dominated the discussion so far. Mitch Kapor, the founder of Lotus Development Corp. and a proselytizer for interactive communications, scolds the industry for focusing on movies and games rather than more civic-minded uses such as community bulletin boards.

Media companies, Kapor says, worry only about "how a few people will make their next few billion dollars." He's right, of course. But in the euphoric early days of this revolution, they probably ought to worry more about losing their next few billion.

By Mark Landler in New York and Ronald Grover in Los Angeles, with Bart Ziegler in New York, Chuck Hawkins in Atlanta, and bureau reports

ning at individual TV sets vastly ds the opportunities for targeted ting.

e American Telephone & Telegraph he long-distance provider is cur- airing a big-budget TV campaign to ack customers who have fled to Communications Corp. or Sprint and another campaign to retain who haven't. If AT&T beam the right spots di- into the right homes, it save millions in redun- advertising, says Robert n, AT&T's director of ad- ng services.

ailers hope to ride the ctive wave by getting ome shopping. Already, Fifth Avenue peddles its on QVC Network Inc., R. H. Macy & Co. is g its own 24-hour home- ing channel, called TV s. The retailer says its channel is designed to sales and won't supplant conventional TV or news- advertising. But Macy's elieves it can no longer the spread of such services as shopping.

other marketers, multimedia is n opportunity to be seized than a to be minimized. For one thing, g the attention of viewers will be than ever in an era of infinite . To survive, marketers say they must produce spots that are just as entertaining and informative as sitcoms or documentaries. One way is to blur the line between the two.

WRONG GALAXY? Bell Atlantic Corp. has chosen to go the infomercial route. For its inaugural effort, the Baby Bell didn't just hire a talking head to do a 30-minute demonstration of call waiting. Instead, it produced a half-hour sitcom featuring a family called the Ringers. In the course of the show, the family promotes several Bell Atlantic services. General Motors Corp. is among other major marketers that have used infomercials, though few big ad agencies have yet assigned staffers to specialize in them.

The trouble is, this approach clashes with the prevailing culture of Madison Avenue. "Creative people don't want to do little stuff. They want to do galaxy-bursting stuff," says Don E. Schultz, a professor of integrated marketing communications at Northwestern University. "But that's not where media is going."

The risk for agencies is that marketers might decide to go elsewhere, too. Already, Coca-Cola Co.'s major U. S. brand campaign comes from Hollywood talent shop Creative Artists Agency Inc. Ad executives say CAA's 24 commercials are clearly designed for the new media world, with a visual style that stands on its own as entertainment. CAA's campaign has drawn japes from ad veterans. Bob Garfield, a critic at *Advertising Age*, likes the commercials, though he notes: "The things are riddled with technical deficiencies of all kinds. It's clear the people who cut them don't understand the 30-second format." Maybe that's the point. Coke, for one, seems to think that the future of advertising won't just be found on Madison Avenue.

CARMAKERS ARE BIG FANS OF ON-LINE ADS, SUCH AS HONDA'S INTERACTIVE COMMERCIAL ON PRODIGY

By Mark Landler, with Laura Zinn, in New York

TOP TO BOTTOM: PHOTO: ©ABC; PHOTOGRAPHS BY ALAN EVERSHOFF; FEATURES DESIGN

Commentary/by Aaron Bernstein

DON'T BLAME THE SLOW JOB GROWTH ON LABOR COSTS

For months, a growing chorus of executives has complained that runaway fringe-benefit costs are making it too expensive to hire workers. Some CEOs even cite health-care and workers' compensation charges as factors in sluggish job growth and warn that the Clinton Administration's plans for health reform could worsen matters. General Electric Chairman John F. Welch Jr. summed up such feelings in May, when he said that "higher taxes and health-care costs are in direct conflict with job creation."

There's just one problem with such assessments: Although it inched up last year, average total compensation for 90 million U.S. workers, adjusted for inflation, is lower than in 1987, when the Bureau of Labor Statistics began tracking it. True, nonwage costs have outpaced inflation. But that has been more than offset by falling real pay and higher productivity. Overall, it's cheaper to hire workers now than it was 10 years ago.

Fringe-benefit inflation is still worrisome, of course. The 7% payroll tax that Hillary Rodham Clinton's group is considering could wallop many small companies, a key source of new jobs. Still, it's unclear how much such a tax would hurt overall job creation, given the moderation in total labor costs. "People are trying to make a political case not to add to taxes and benefit costs, so they're exaggerating the problem," says David Wyss, research director at DRI/McGraw-Hill. "The argument that labor is too expensive is silly."

PAINFUL JUMP. His point is made by the BLS figures. They show that employers on average paid $1.02 an hour for health care last year, a painful 23% jump since 1988, even after adjusting for inflation. Hourly wages, however, have fallen 2.3%, or 35¢, behind the consumer price index since then. So the inflation-adjusted total for an hour of labor fell 1.3%, to $16.14 (chart). Take into account healthy productivity gains, and, in real terms, employers now spend 3.8% less for pay and benefits per unit of output, says the BLS.

In this context, a 7% health-care tax looks less scary. True, many small employers would suffer payroll-tax shock. For instance, only 51% of the 37 million workers in companies with fewer than 25 employees now have company-paid health coverage, according to the Employee Benefit Research Institute (EBRI), an independent group in Washington. The Clinton plan might make all companies cover their workers.

Still, there could be mitigating factors for the overall economy. Such a tax may be phased in over several years. Beyond that, companies already spend 7.8% of their payrolls on health care, according to the BLS. This means that employers who do provide coverage pay more than 7.8%, while those who don't pay less. So while a payroll tax would sock it to those with no plans, those with expensive plans would save if they paid only 7%, as Clinton's plan would allow. Such employers would likely cut coverage or raise co-payments, as many have done in recent years. "We told Hillary's task force that a 7% tax should be a wash on average," says William Custer, the EBRI's research director.

Even if health-care costs do rise, they might not hold back job growth. The reason: Most economists believe that workers foot the bill for benefit increases through smaller pay hikes. "Rising benefit costs aren't doing much to hiring, but they are keeping real wages down," says Jonathan Gruber, an economist at Massachusetts Institute of Technology. In a recent study, he found that the soaring costs of workers' compensation between 1979 and 1987 resulted in lower real wages but had no effect on employment.

HIRING AWAY. In fact, the historical record suggests that compensation could even rise a little faster without hurting job growth. In nominal terms, pay and benefits per unit of output have climbed 3% since the recession ended in early 1991. By contrast, they jumped an average 6% in the first two years of the eight prior recoveries, BLS figures show. And employment in those recoveries rose an average 6%, vs. less than 1% now. "Given past recoveries, you should be able to raise labor costs [more] without hurting employment growth," says William Dudley of Goldman, Sachs & Co.

If that's true, what's going wrong this time? The relative cost of labor is one of the problems. Falling interest rates make capital cheaper relative to labor. Companies thus have a greater incentive, say Dudley and other economists, to invest in labor-saving equipment.

The recovery's slow pace is important, too. Economic output is up 6% in the past two years, vs. an average of nearly 13% in the prior eight recoveries. With the outlook for higher sales so unclear, employers are reluctant to hire. "If the business climate were better, companies would hire even with health-care uncertainty," says Allen Sinai, a managing director at Lehman Brothers Inc.

A case in point: Home Depot Inc., which plans to open 50 superstores this year, on top of 224 existing ones. The Atlanta chain hired 11,000 workers in 1992 and has added 6,000 more since January. Some 96% of its 45,000 employees are in the company's medical plan; the rest go on after 90 days. "We do worry about health-care costs," says Ronald M. Brill, Home Depot's chief financial officer. "But I'm not going to stop hiring because of that."

Aaron Bernstein covers labor issues for BUSINESS WEEK.

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STRATEGIES

A RETAILING PACESETTER PULLS UP LAME

Price Co. surrenders to a merger with rival Costco

When Sol Price opened a 100,000-square-foot discount store outside San Diego in 1976, he launched a retailing revolution. Selling tires, office supplies, and five-pound tubs of peanut butter at rock-bottom prices, his 25-store Price Club chain was generating $2.6 billion a year in sales within 10 years and had spawned a flood of imitators. Indeed, it gave birth to an industry.

But 17 years and a raft of new competitors later, Price has been faltering. And on June 16, the company said it would merge its 95 stores with $6.6 billion competitor Costco Wholesale Corp. The deal was a stunning reversal of fortune: Heading the combined companies will be Costco's 57-year-old CEO, James D. Sinegal, who had worked for the Prices for 23 years before becoming one of their most formidable competitors.

CEO ROBERT PRICE WAITED TOO LONG TO EXPAND

"ARROGANCE." Price Co.'s fall serves as a stark reminder to mass-market retailers that past success means little in a fiercely competitive and rapidly changing industry. It was the inflexibility of Price Co.—led since 1989 by Sol's 50-year-old son, Robert—that brought about its demise. Throughout the '80s, the Prices refused to expand much beyond their California base. When they finally began to add stores aggressively in 1991, they ran headlong into such rivals as Costco and Wal-Mart's Sam's Clubs. "Having too much success breeds arrogance," says Sol, 77. "Having someone do it as well as you do sobers you up."

Sol Price created the first warehouse club after selling Fed-Mart Corp., a chain of discount department stores he had started 22 years earlier. The idea behind the warehouse store was simple: Carry a select number of products—about 3,000, compared with more than 10 times that number in supermarkets—and turn the inventory rapidly at low margins. Appealing to both small businesses and families who liked buying in bulk at cheap prices, the bare-bones warehouses caught on. By the time it went public in 1980, Price Co. had sales of $148 million and was on its way toward racking up 11 straight years of increased earnings.

The first signs of trouble came in 1983, when a slew of new competitors, including Sam's, Costco, and PACE Membership Warehouse Inc., appeared. Later, the Prices also found themselves slugging it out with mass merchants such as Wal-Mart Stores Inc. and supermarket chains that were trying to woo back customers with their own bulk products.

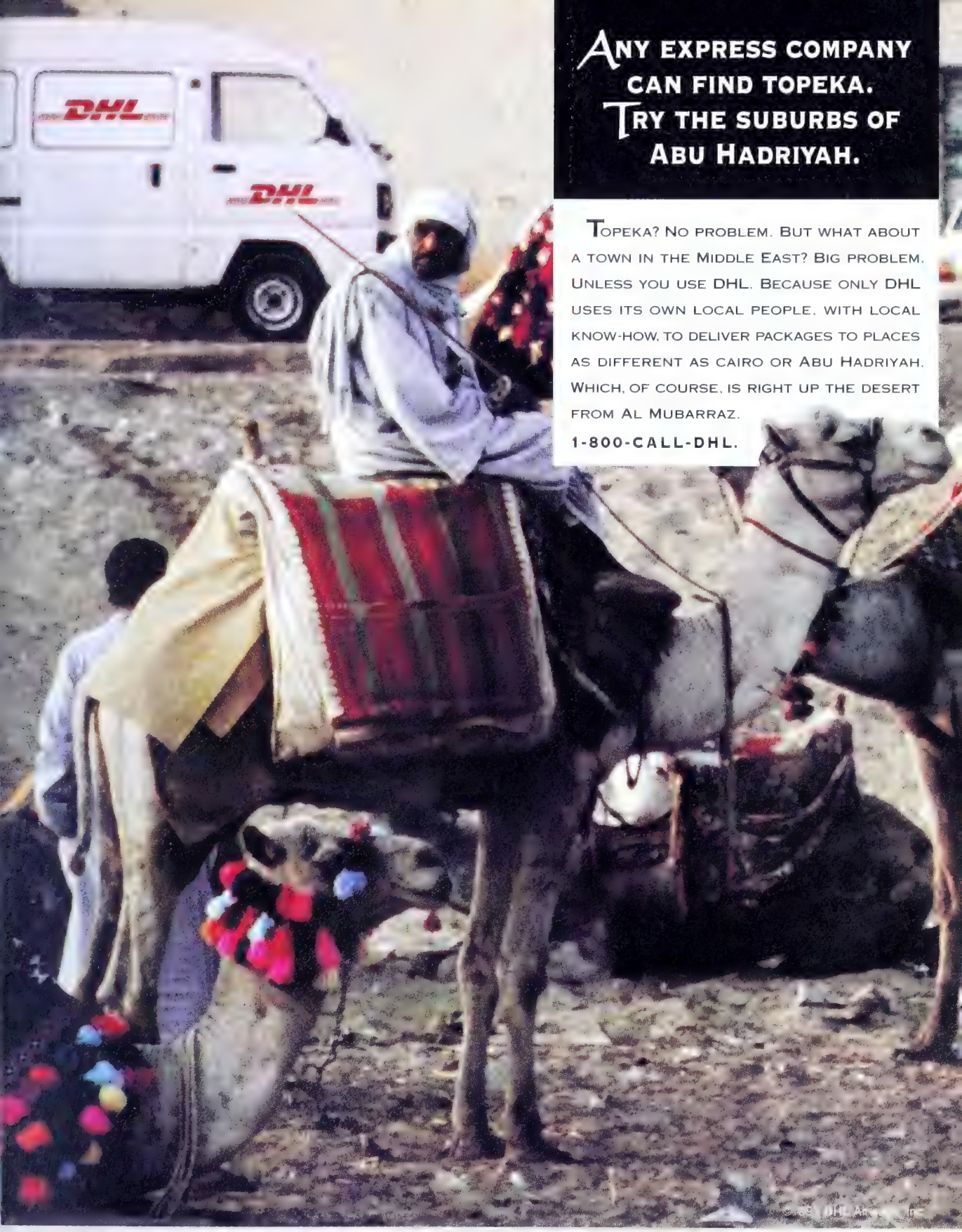
But instead of responding to the threat by pushing into and dominating new markets, Price Co. remained almost exclusively on the West Coast, with a heavy concentration in the booming Southern California market. At the time, the Prices said the moderate pace of expansion was prudent and necessary to ensure that management had tight control over operations. But that left the rest of the country wide open for more aggressive competitors. Within four years, Costco and Sam's—with 39 and 49 stores, respectively—had sur passed Price's network of 35 clubs.

Contributing to the slow expansior say analysts, was the Prices' heavy focu on real estate. They built and owne their warehouses as well as almost ha the shopping centers where the outlet were located. The strategy gave ther more control over their destiny—but i was expensive. In the past three years Price Co. has spent more than $200 mi lion on purchasing and developing th real estate around its outlets. So whe the Prices finally decided to step up th pace of warehouse openings in 1991, the had to liquidate some of that portfolic spinning $150 million in real estate into publicly traded real estate investmer trust now run by Sol Price.

What's more, the real estate focu also meant the Prices spent less tim on the basics of the business. Compet tors such as Costco began experimentin with fresh meat, produce, and baker ies—offerings that entice members t come into the store on a more regula basis—as early as 1987. Price didn't ro out such new merchandise until 1991.

By the time the Prices finally decide to expand in earnest in 1991, it was to late. Pushing into new markets alon the East Coast and in Texas, the Pric Clubs had little to differentiate them selves from the competition. Warehou es in Buffalo and Bensalem, Pa., tha opened in 1990 and 1992, respectivel were forced to close last fall, unable t make inroads in regions already pen trated by Sam's and PACE.

The Prices' expansion in California t defend their home turf also proved di astrous. The company added 11 ne



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Price Clubs to its 29-warehouse chain in California starting in 1991. But those new outlets—which helped push overhead costs up 60% in two years, to $630 million—cannibalized existing locations. That, combined with a soured local economy, contributed to the steep falloff in sales per warehouse (chart) and a drop in the speed of inventory turnover.

SNAGS. It wasn't long before Price Co.'s bottom line felt the impact of the competitive onrush. In 1992, earnings fell for the first time since the company went public, down almost 4% for the fiscal year ending August, 1992. That trend continued in the first three quarters of this fiscal year, with income sliding more than 18%, to $81 million, as revenues rose 6%, to $5.9 billion. The stock, which hit a high of 65 in the summer of 1991, had tumbled to 30 prior to the merger announcement.

Last year, the Prices began looking for a partner. Robert Price, industry sources say, held talks with a number of warehouse operators and mass merchants, including Kmart Corp.'s PACE. Discussions with Costco's Sinegal also went on for months but snagged on the question of who would run the combined company. But by early May of this year, with profits dropping, Sol Price decided it was time for a deal. That's when he called both Robert and Sinegal to his La Jolla (Calif.) home, leaving them alone to smooth out their differences.

The deal that emerged puts Sinegal, as CEO of the new company, firmly in control of the core U.S. warehouse operations. Robert Price, a onetime Peace Corps volunteer and law school dropout, will hold the title of chairman, with control over expansion in such regions as South America and the Pacific Rim. While both Robert Price and James Sinegal declined to comment for this story, Sol Price explains: "We are up against such mammoth companies that we're better off together than apart."

The deal has been greeted, for the most part, warmly by analysts. The new company, Price/Costco Inc., will have 195 outlets with $16 billion in revenues. And the focus at both companies on international expansion should keep them ahead of the competition overseas. True, the merger may not measure up to the retail revolution that Sol Price began in 1976, but for the moment it seems to ensure the survival of the nation's pioneering warehouse chain.

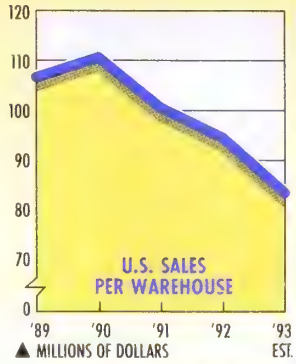
By Amy Barrett in Los Angeles

HOW PRICE'S MISSTEPS...

- Price expanded slowly in the 1980s, allowing clones such as Costco and Sam's to stake claims in new markets in the Northwest and Midwest.
- Spent massive time and capital on real estate development, a distraction from the core business.
- Failed to keep pace with new products. Waited until 1991 to introduce fresh meats and baked goods, staples at some competitors since 1987.
- Pursued ill-fated expansion. Opened 11 additional warehouses in California when the state's economy was depressed. Expansion program on the East Coast was overtaken by competitors.

DATA: BUSINESS WEEK, TACTICAL RETAIL SOLUTIONS INC.

...PUMMELED SALES



TOKYO, August 1929. The *Graf Zeppelin* had stopped in Japan on its epic voyage around the world. Naturally, it fell to the Imperial Hotel to cater all meals for the passengers on the *next* leg of its flight – this time, to Los Angeles! Our chefs rose gallantly to the occasion. When the ship took off again, it had on board the makings of *1098 gourmet meals* – each as fresh and varied as any served in first-class cabins today. And so The Imperial, too, went down in aviation history – and raised catering to new heights, besides.

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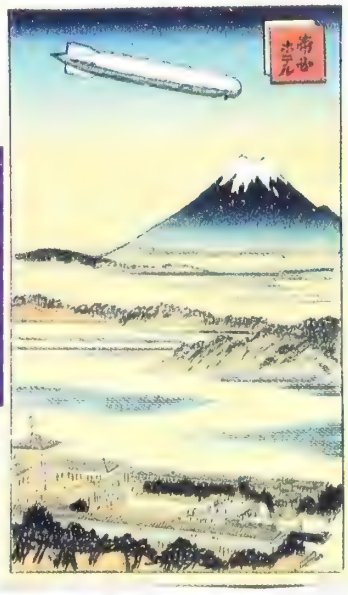

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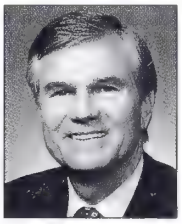

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CORPORATE GAMES

SWINGING AND SWEATING WITH THE BOSS

Today, you may need a puck or tap shoes instead of a set of clubs

Remember the old *Honeymooners* episode when Ralph Kramden volunteers to tutor his boss in billiards? "This is how you get places—socializing with the higher-ups," Ralph boasts to his buddy Ed Norton.

The Great One is gone, but the idea of cozying up to the boss through sports lives on. Every year, thousands of ambitious executives and middle managers of both sexes shell out big bucks on golf clubs, duds, greens fees, and lessons. Golf is still the dominant sport of Corporate America, and schmoozing on the fairway is a time-honored way to get ahead or grease a deal. But these days, golf and tennis are hardly the only games businesspeople play to advance their careers, bond with colleagues and clients, or simply to feel they're part of the corporate culture.

How, for example, might you get ahead at Interep Radio Store? Try tap dancing with the chairman. At noon, just walk into the New York City headquarters of this company, which sells advertising for radio stations. Employees are dancing to live music in the corporate dance studio led by a top dance teacher. Not your typical lunchtime activity. But then, Ralph C. Guild is not your ordinary boss. A tap dancer for more than 15 years, Guild has made it possible for employees to follow in his footsteps.

EASIER APPROACH. At Interep, a sassy soft-shoe can enhance business relationships, thinks John M. Viola, an Interep account executive. "It's easier to approach people in the office if you just tap danced with them an hour ago," he says. "It breaks down all the barriers of set jobs and hierarchy."

Some senior managers at Sun Microsystems Inc. use hockey to break barriers, if not bones. Chief Executive Scott McNealy is a hockey nut who plays on a local Silicon Valley team called the Leafs. Surprise: Seven other team members also work at Sun. But Robert Gianni, a technical-engineering manager, points out that he and a colleague were already members when McNealy and Vice-President Curt Wozniak joined about three years ago. Gianni says the attraction for many of the Sun players isn't slapping pucks with the chief but playing a game of their youth. O.K.

Michael D. Dingman, CEO of General Chemical Group Inc., a Hampton (N.H.) chemicals maker, regularly combines sports and business. Dingman's thing is lunch-time power-walking with top operating execs. Dingman says it affords him time for exercise and uninterrupted conversations. Managing Director Edward F. Kavanaugh walks frequently with his boss. "It really helps the overall business and personal relationship when you spend this kind of quality time together," he says.

At some companies, sports form an integral part of the corporate culture. At Microsoft Corp., "it's an intense play-hard, work-hard atmosphere," says Jon Staenberg, a marketing manager. "A lot of business is done in the fields." Employees with common interests form groups and send out information and schedules of athletic events over electronic mail. Microsoft people participate in car rallies, sailing, rock climbing, flag football, and paragliding.

Corporate fitness centers at such companies as PepsiCo Inc. and Reebok International Ltd. can be great places for all levels of employees to meet on common ground. Robert Teufel, president of Rodale Press Inc., sweats with employees in a morning circuit class (combining aerobic exercise and weightlifting) three days a week at the company's headquarters in Emmaus, Pa. "Those people who choose to participate get a chance to communicate with him differently," says Budd Coates, director of Rodale's gym called the Energy Center.

TEE TIME. Many employees venture outside the company to hone their skills. Golf as a Business Tool Conferences—for executive women—are being held in Chicago and Hilton Head, S.C., this summer. "For years, I've watched men play golf with each other and do good business because of it," says Sylvia Allen, a consultant in Holmdel, N.J. "If it works for them, why wouldn't it work for me?" Allen is among some 150 women who have signed up for the seminars, which cover everything from the rules of the game to etiquette on the links.

On Wall Street, up-and-comers often see the squash court as a way to get ahead—even cramming with instructors before matches with the chief. Says Pat J. Canavan, a New York City squash pro: "A lot of young Wall Street folks want to learn to play the game so they can hobnob with their bosses."

But while whacking a ball around with your superior can be a great way to develop a relationship, it can also backfire. Microsoft's Staenberg says after he bested a higher-up in racquetball, the man's attitude toward him completely changed. "Politically, I probably shouldn't have beaten him," he says. That's one important lesson when mixing any sport with business: There's a fine line between a spirited rally and beating the tar out of the boss.

By Lori Bongiorno in New York with Robert D. Hof in San Francisco

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After nearly seven years, The LTV Corporation has emerged from Chapter 11 reorganization.

We are a new company, focused on flat-rolled, tubular and tin-plated steels, and on oilfield components and services.

Our reorganization came not without cost. We relied on the help, support and sometimes the sacrifice of many who've been associated with us through the years.

Thanks to the continued belief in us by our many customers, suppliers and employees, we made–and continue to make–some remarkable improvements.

In leading-edge quality. In productivity. In modern equipment.

In short, we've created a stronger, more sharply focused company with what I believe to be a very promising future.

What we've accomplished.

The new LTV emerges as a major integrated steel supplier, especially of value-added products–carbon electrical steels, electrogalvanized steels and ultralow carbon steels.

We are the largest supplier of flat-rolled steel to the auto industry. In fact, we are the first steel company qualified by all auto manufacturers in the United States.

Our company leads in shipments to the appliance and electrical equipment markets–some of the most quality-sensitive customers anywhere.

And, in terms of productivity, LTV employees are 2½ times more efficient than they were 10 years ago. LTV workers are now among the most productive in the world.

Tons shipped per employee

Since 1982, LTV employee output has increased 2½ times–making us a world leader.

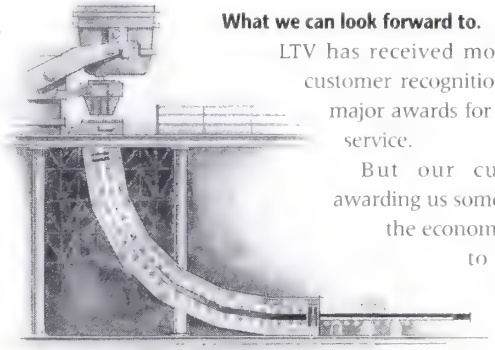
The steel of the future.

A big part of LTV's comeback can be attributed to state-of-the-art technology. For example, we now have the newest, widest continuous annealing line in America, giving us the capability to produce the new generation of lighter and stronger steels.

We built two new vacuum degassing facilities, giving us one-third of the national market for the sophisticated high-tech steels.

Our new Direct Hot Charge Complex, with a new continuous slab caster, will start up in September, enabling LTV to compete head-on, in productivity, with any flat-rolled minimill anywhere. Not only will we be making higher-quality steel, but our new complex will cut costs by another $50 per ton.

Altogether we've invested over $2 billion in new equipment since 1986. And thanks to our creditors, we start fresh–with everything bought and paid for.



Our new continuous caster and Direct Hot Charge Complex will result in LTV steel being 100% cast.

What we can look forward to.

LTV has received more than its share of customer recognition, winning over 100 major awards for excellent quality and service.

But our customers are also awarding us something else–orders. As the economic recovery continues to grow, many of our major customers are stepping up production.

Prices are beginning to increase to more reasonable levels. And to further strengthen our business, our company-wide cost reduction program has been intensified.

The future holds a lot of promise for LTV. We're proving it with our commitment to continually improve our products and services to satisfy our customers' needs 100% of the time. And we're backing it up with a 100% quality guarantee–the only one in the steel business.

Prestigious awards include the GM Mark of Excellence, Ford Q1 and RIT/USA TODAY Quality Cup Award.

We're determined to make LTV the clear leader in the North American steel industry. Keep an eye on us. Because today, our future really begins.

Dave Hoag

David H. Hoag, Chairman/CEO, The LTV Corporation

LTV The LTV Corporation

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SAUL STEINBERG'S HONEY POT NAMED RELIANCE

he $8.4 billion insurer made sweet deals with family members, and some investors felt like suckers

Saul P. Steinberg, a round fellow with a deceptively cherubic grin, runs a family business. During the keover wars of the 1980s, insurer Reli-ce Group Holdings Inc., which is 66% vned by the 53-year-old financier and s relatives, made him one of the na-on's wealthiest people. Through rewd moves and fearless power plays, built an estimated $300 million for-ne by reaping luscious greenmail pay-ents from such takeover targets as alt Disney, Lomas & Nettleton Finan-l, and Green Tree Acceptance.

The 1980s takeover mania, though, is ng gone. Absent greenmailing, Reli-ce (assets: $8.4 billion) hasn't been do-g too well, running slender profit mar-ns some years, red ink in others. Since airman and Chief Executive Steinberg ok Reliance public in 86 at 10, the stock s skidded to almost lf that, dealing the einbergs and outside vestors some heavy per losses. Only in re-nt months has it ched up to around 7.

EW ISSUE. How has ul been making ends eet? Easily. For ars, Steinberg has nnily—and entirely le-lly—used Reliance's sources to benefit nself and his kin, no atter what the stock doing (table). The mpany has routinely owered lush salaries d perks on the Stein-rg clan, as well as lped fund their other sinesses and granted em generous personal ans. The latest exam-e is a still-outstanding .5 million loan to see unger brother (and eliance President) obert M. Steinberg rough a divorce while his assets were tied up. That's far more than companies usually lend executives.

All this is of current interest since Reliance may soon try to float new stock to help clean up its overleveraged balance sheet. The last time Reliance sold stock, a major stink erupted about Steinberg family back scratching. Investor-critics alleged in a lawsuit, which since has been settled amid charges the company co-opted the plaintiffs' lawyer, that the Steinbergs padded their wallets at the expense of nonfamily shareholders—contentions Reliance denies. The new issue could spur similar questions. Steinberg says he is devoted to the good of all Reliance investors. "I've put my life into this company," he says.

Of course, the main reason Reliance has languished is a lousy property-casualty insurance market and a big interest tab on its towering debt. But Steinberg is making progress at turning around the company by planning to refinance the $1 billion debt, shedding poorly performing subsidiaries, and focusing on promising ones. New specialty lines, such as hazardous-waste-hauling coverage, and property title insurance are very profitable. He has cut Reliance's horrific 1991 loss of $145.6 million by 75% in 1992, to $35.6 million.

FEATHERED NEST. Heartened by these developments, some Wall Street analysts forecast that the insurer will be in the black as early as this year and log increasingly healthy performances in later years. Predicts Ernest G. Jacobs, an analyst with Furman Selz Inc.: "Reliance's stock will reach the low double-digits within the next 12 months." If so, that will be a selling point in any new offering. Whether it will quiet critics is another question.

Critics tend to focus on the extent to which Reliance, despite its size, is too much a family affair. Saul, the company's largest stockholder, is the long-term strategist. Brother Robert, three years Saul's junior and called Bobby, oversees the daily operations of Reliance and owns the second-biggest stake. Known for his boisterous sense of humor, Bobby works well with his brother; the two often finish each other's sentences. Sisters Lynda Jurist and Roni Sokoloff each own nearly 4%. Roni's husband, Bruce, is a Reliance senior vice-president and a shareholder. Saul's six children and the other relatives' kids

RELIANCE: A FAMILY PIGGY BANK?

SALARIES Despite Reliance's stumbling performance, Saul Steinberg has for years been among the best-paid corporate chieftains in America. Total 1992 pay: $6.3 million. His brother and company president, Robert, made $3.8 million. Company says outside directors set compensation tied to performance.

PERKS A 1990 lawsuit charged that the family took $100 million out of Reliance in dividends, travel expenses, entertainment, and salaries during a four-year period in the 1980s, when they owned all its stock. Company says suit had no merit and settled.

SON'S BUSINESS Money-losing investment advisory service headed by Saul's son, Jonathan, got $1 million from Reliance in late 1991, in return for 14% stake. Proceeds helped retire $650,000 in bank loans that father and son had guaranteed. Company says action was O.K.'d by Reliance internal investment oversight committee, composed of Reliance employees.

PERSONAL LOANS Most recent: $1.5 million to help out brother Robert while his assets were tied up in divorce proceedings. Biggest loans, now retired, were $46 million to Saul, $11.5 million to Robert, and $4.6 million to brother-in-law Bruce Sokoloff. All charged prime rate except $410,000 loan to sister Lynda Jurist, which was interest-free. Reliance says it had power to grant loans.

BROTHER-IN-LAW CONTRACT Reliance paid $404,000 in 1991 and $274,000 in 1992 for printing work to company owned by brother-in-law Joseph Jurist. Company says he won competitive bids.

DATA: COMPANY REPORTS

own stock via trusts. Not surprisingly, Reliance's board is abnormally heavy with insiders. Only 4 of the 13 members are outside directors. Saul and Bobby are the only family members. In a survey by executive-search consultants Spencer Stuart & Associates of 1993 proxies, outsiders outnumbered insiders on almost all corporate boards.

Despite Reliance's spotty performance, Saul Steinberg collects a fat pay envelope. His 1992 haul, comprising salary and bonus: $6.3 million. His and Bobby's $3.8 million compensation last year exceeded the $8.2 million dividend payout to nonfamily stockholders. In fact, Saul's pay was almost triple that of Maurice R. Greenberg ($2.2 million), head of insurance powerhouse American International Group Inc., which earned $1.6 billion in 1992.

ANGRY INVESTORS. Saul points out that his pay is set by a special committee of outside board directors, based on performance, particularly on his success at restructuring the company. He says his 1992 bonus of $3.1 million is up 16% from 1991's largely because of his sale of the company's lackluster Frank B. Hall & Co. insurance brokerage subsidiary. Ironically, it was Saul who decided to buy the ill-fated Hall in 1983.

Protests that the Steinberg family has been milking the company became most intense during a 1990 class action on behalf of investors in Reliance's 1986 initial public offering. Disgruntled shareholders contended that from 1982 to 1986, when Reliance was private, the family sucked vast sums—$100 million, according to an early version of the suit—out of the company by way of excessive salaries, huge dividends, and travel-and-entertainment expenses unrelated to Reliance. To pay for all that, the suit alleged, the insurer didn't strengthen loss reserves enough to satisfy claims—and covered up the danger in the rosy 1986 IPO prospectus. Reliance's reserves were discovered in the late 1980s to be so meager they had to be propped up, thus depleting profits.

The company denied the charges of intentionally skimping on reserves, and a court-appointed examiner concurred with Reliance. The examiner accepted Reliance's explanation for the reserves shortfall: After the IPO, massive, unexpected claims materialized for asbestos injuries and the like. The suit was settled in late 1991. Stockholders got warrants to buy new shares, and Reliance agreed to install an ombudsman to watch over its reserving practices.

ALL IN THE FAMILY: ROBERT WITH BROTHER SAUL

This provoked a new flap that the family was using Reliance money to buy its way out of trouble by allegedly co-opting the plaintiffs' attorney, Sidney B. Silverman. How? During settlement negotiations, Reliance enlisted Silverman to be the ombudsman at $250,000 annually, guaranteed for 10 years. Outraged, investor R. Allan Martin, head of Saddle River (N. J.) money manager Empire Programs Inc., objected to the judge that this "certainly looks like a bribe to go away." Reliance says it turned to Silverman as ombudsman only because he knew the case. And Silverman dismisses Martin's complaint as nonsense. Regardless, the judge instead chose someone unconnected to the suit, former Equitable Cos. CEO Coy Eklund.

Outside of Saul's pay, the specific ways Reliance showers manna on Steinberg relatives have received little attention, although they are disclosed in company filings. Take its loan policy. The insurer is one of few companies that lends to its executives—just 6% do so, a recent Hewitt Associates survey says—although the prime rate Reliance charges in interest is in line with the others.

But the size of the loans is off the charts. Hewitt says executive loans usually are under $100,000, and in rare cases are in the $500,000 to $1 million range. In the mid-1980s, when Reliance was private, Saul borrowed $46 million while Bobby was loaned $11.5 million Sister Lynda Jurist, not even an employ ee, got $410,000 at no interest. Thos loans were repaid before the IPO.

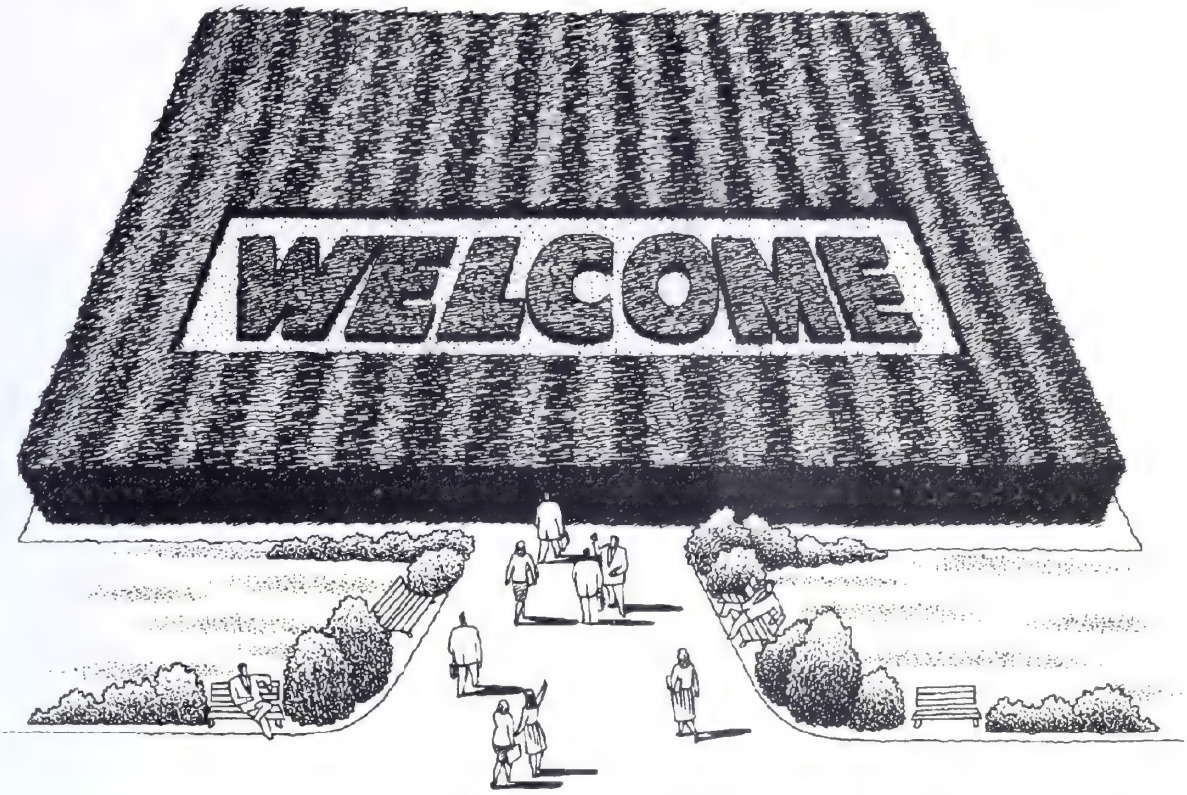
WELL-CONNECTED. Moreover, Reliance has pumped $1 million in equity capita into the money-losing investment adviso ry service headed by Saul's son, 28-year old Jonathan, known as Jono. Financia Data Systems Inc.'s monthly publica tions win high marks from Wall Stree for insight, but the outfit still is mired i the red. The Reliance investment helpe pay off $400,000 in loans that Jono ha guaranteed, plus an additional $250,00 co-signed with his dad. Reliance say this transaction, which it dismisses a "minuscule," was approved by an over sight committee of its staffers. Jon didn't return calls for comment.

Further, brother-in-law Joseph Jurist' printing company was paid $678,000 b Reliance in the past two years for prin ing work. Jurist did not return phon calls, either. Reliance says he won th jobs in competitive bidding.

The Steinbergs may turn Reliance around to the point where no one care what they do. But until then, the riche are mostly family values.

By Larry Light in New Yor

The Only Large Item In Our New Small Investors Program.



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BROKERAGES

SANDY WEILL SNARES MORE BIG GAME

Greenhill fits Primerica's profile: Gifted and out of favor

The two men couldn't be more different. Brooklyn-born Sanford I. Weill built his own retail securities firm from a patchwork of second-tier brokers, while Robert F. Greenhill rose to the top of white-shoe Morgan Stanley & Co. by assembling a list of blue-chip clients. In 1978, Weill became one of his clients as well, and by the early 1990s, they were talking almost every day, living near one another in Greenwich, Conn., and their wives had been fast friends for years.

So last March, when Greenhill abruptly announced he would step down from the No. 2 job at Morgan Stanley to become a senior adviser to the firm, Weill sensed a golden opportunity. On June 24, an ebullient Weill announced that Greenhill would replace Frank G. Zarb as head of Smith Barney Shearson Inc., the brokerage subsidiary of Weill's Primerica Corp., which recently bought Shearson Lehman Brothers Inc. from American Express Co. Greenhill says his move was unrelated to his prospects at Morgan Stanley. "For 10 years, Sandy's been talking to me about joining him as a partner. It never made any sense until he bought Shearson," says Greenhill.

UNDERDOGS' HERO. This isn't the first time Weill has swooped in on executives at other firms who have fallen out of favor. Through his wide network of personal relationships on Wall Street, Weill has assembled a management team with impressive results. "He's like Al Davis and the Raiders. He always seems to find people who other teams gave up on and turns them into stars," says Brian Posner, a portfolio manager at Fidelity Investments, referring to the general manager of the Los Angeles football team. Posner believes Weill's recruiting skills are a big reason Primerica's stock has gone from 15 to 52 since 1990.

Weill won't acknowledge that he courts people after they hit a brick wall elsewhere. "A lot of very successful people come here because they can be more successful," is all he will say.

But consider Jeffrey L. Lane, who worked with Weill at the brokerage firm that became Shearson Lehman Brothers. As president under Chief Executive Peter A. Cohen, Lane was known as a strong administrator. Yet Lane took the heat for some of Cohen's mistakes and was essentially demoted in 1989. When Weill, then Primerica's CEO, called Lane to offer his sympathies, Lane was ready to leave. "People develop extremely positive feelings toward Sandy over time. When an opportunity presents itself, Sandy plucks them," says Lane, now vice-chairman of Smith Barney Shearson, where he has significantly increased the firm's assets under management.

By 1986, Robert Lipp, a 23-year veteran of Chemical Bank and one of its three presidents, had reached a plateau in his career. Lipp was ready for a new challenge and so was open to Weill's overtures to run Commercial Credit Co., Primerica's consumer finance company. Since then, CCC's earnings have jumped from $25 million to $193 million, and assets have grown from $2.5 billion to $6 billion. "We're refugees from bureaucracies and we're proud of it," says Lipp, who now is also overseeing Primerica's 27% stake in Travelers Insurance Co.

SANDY WEILL'S TEAM OF RECYCLED MANAGERS

GEORGE BALL, 54. Formerly CEO of Prudential-Bache. Now handles "special projects" at Smith Barney Shearson.

EDWIN COOPERMAN, 49. Was American Express executive. Heads Primerica's insurance company.

PETER DAWKINS, 55. Former Lehman partner. Manages insurance sales force.

LEWIS GLUCKSMAN, 67. Legendary Lehman trader, now senior adviser to Smith Barney Shearson.

ROBERT GREENHILL, 57. No. 2 executive at Morgan Stanley. Now CEO of Smith Barney Shearson.

JEFFREY LANE, 51. Former president of Shearson Lehman Brothers. Runs several Smith Barney Shearson units.

ROBERT LIPP, 55. Was Chemical Bank president. Manages consumer-credit operations and Travelers stake.

FRANK ZARB, 58. Former U.S. Energy czar, partner at Lazard Frères. Manages several Primerica subsidiaries.

DATA: BUSINESS WEEK

GREENHILL: A FAT HIRING BUDGET?

Another refugee is Edwin M. Cooperman, a former American Express colleague of Weill's who ran AmEx' card business. In 1991, AmEx CEO James D. Robinson III installed Harvey Golub over Cooperman. Weill promptly nabbed Cooperman to head the ailing Primerica Financial Services, formerly the A. L. Williams Life Insurance Co. "I spent more time with Sandy and Joan Weill in the few months before and after I joined Primerica than I spent with Jim and Linda Robinson in 19 years," says Cooperman. He has stabilized PFS, which should show an increase in sales in the second quarter, says Fidelity's Posner.

BAD PICKS? Not all of Weill's hires have become stars, however. In 1992, Weill recruited George L. Ball, the former chief executive of Prudential-Bache Securities Inc. Under Ball, Pru sold billions in limited partnerships that left investors and the firm with huge losses. Ball, a Smith Barney senior executive vice-president, works on "special projects," says a spokesman. Ball declined to comment. Weill will only say: "I like George as a person very much."

Primerica's stock soared on the Greenhill news, but some observers have doubts about him. Street sources say Greenhill, known as an abrasive, 1980s-style dealmaker, was pushed to step down at Morgan Stanley because he was a poor administrator. Says Greenhill, who is rumored to have been given a lavish hiring budget from Weill: "I don't think Sandy would have hired me to manage 26,000 people if he shared that view." Greenhill needn't worry: Weill almost never gives up on his hires. Stars or nonstars, their refugee days are over.

By Leah Nathans Spiro in New York

08 LINNON H

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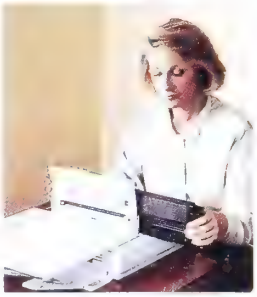

And now Canon, along with AT&T and American Express is making a very special offer. When you purchase a Canon PC 300 series personal copier between June 1 and August 31, 1993, we will send you your choice of a $25 American Express® Gift Cheque or a $25 AT&T Long Distance Certificate.

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THESE DAYS, HMO STOCKS ARE IN THE PINK

They're thriving on the rush to managed care. But tread cautiously

Florida's first licensed health-maintenance organization (HMO) opened its doors 23 years ago in Miami's Little Havana. Ramsay-HMO Inc., then known as Clínica Asociación Cubana, served a small group of exiles who were accustomed to clinic medicine. Native Floridians had no reason to go there. They were suspicious of clinics. The whole idea of HMOs—organizations offering health care to members at low costs by keeping expenses under tight control—was not well known or understood. Most people preferred to see their doctors in private offices, on a fee-for-service basis.

Now, however, Ramsay is doing a land-office business. The company boasts 14 facilities and 122,000 members across South Florida, and, as HMOs gain wider acceptance, it's even opening up in tony Palm Beach County. Revenues for the year ended June 30 are expected to increase 37%, to $273 million, and profits by 60%, to $12 million. Ramsay stock, at 30½, traded as high as 39¼ earlier this year before pulling back. Still, Ramsay shares have tripled since the company went public in December, 1989.

BE PICKY. What's driving Ramsay's growth—and that of all HMOs—is the quest by business and government to control skyrocketing medical costs. By getting employees to enroll in HMOs in lieu of traditional insurance, companies can cut their health-care costs by nearly 20% a year, according to consultants Foster Higgins. Government administrators also want to save money by getting more Medicaid and Medicare patients into HMOs. More than 43 million people are now enrolled nationwide, and that's expected to double by the year 2000. Crows Luis E. Lamela, Ramsay's president and CEO: "We're uniquely positioned to prosper."

So are investors in HMO stocks. An index of 16 HMO issues followed by the investment firm Furman Selz Inc. showed a 80% overall gain last year alone, with some individual stocks nearly tripling in price. After losing about 20% early this year amid uncertainty about Washington's reform plans, the HMO group has regained momentum in recent weeks, and prices are again surging (chart). Publicly traded HMOs account for about one-third of the enrollees nationwide. The other HMOs are either nonprofits, hospital affiliates, or run by traditional health insurers.

Time to cash out? Probably not. But it is a time to be picky about making new investments. Says Stephen M. Dalton, a portfolio manager at CoreStates Investment Advisers who has followed the industry for a decade: "I have only three names I really like, and that's a benign way of saying I'm bearish."

Every market follower has particular reasons for betting on the HMOs that could be the next winners. Dalton, for instance, is high on Wellpoint Health Networks Inc., a Blue Cross of California spin-off, because it's putting the brakes on costs: It recently cut by 6% some of the fees it pays independent doctors. He also likes Miami's Physician Corp. of America because it is winning business in states such as Texas, which is joining California and Florida in experimenting with sending Medicaid patients to HMOs.

Many HMOs have ambitious expansion plans. United HealthCare Corp. surprised the industry in May by agreeing to acquire 300,000-member HMO America in a stock swap that will boost membership to 2.2 million and make it a power in the Chicago market. That kind of size will let United compete with deep-pocketed Prudential Insurance Co. and CIGNA Corp., which are fast expanding their HMO networks, too.

PENNY-PINCHING. Even smaller companies, sensing consolidation, are hell-bent on adding to their rolls. "The managed-care plans that survive are going to accelerate their growth," says Michael E. Herbert, president of Physicians Health Services Inc. in Trumbull, Conn., a 150,000-member outfit aiming at 400,000 members in five years. The stock, at 14¾, went public at 15 earlier this year and is one of the lesser-known but cheaper stocks in the group: Its price-earnings ratio is only 11, while larger, better-known United HealthCare has a lofty p-e of 36.

It may be easier to sign up new enrollees than to ring up big revenue gains. True, the Clinton Administration's proposals will likely carve out an important role for HMOs and other managed-care organizations. But the government's hand will certainly pinch pennies, and profit margins will fall. That's why analysts favor HMOs with a diverse membership—coming from both government and business—and a history of making money on government business. "The real quality companies are the ones that can thrive under that environment. It's a tougher business," says Wellington Management Co. Vice-President Kenneth L. Abrams. Among his favorite stocks are FHP International, HealthSource, and Humana.

Coping with tough costs is nothing new to HMOs, of course. That's precisely why they're on the front lines in the battle against mounting costs—and why investors have such high hopes. But with stock prices gaining fast, investors may have to be just as tough-minded to snare the most promising ones.

By Joseph Weber in Philadelphia, with Eric Schine in Los Angeles

HMOs COME BOUNDING BACK...

▲ INDEX: DEC. 27, '91=100

...AND HERE ARE SOME TOP PICKS

Stock	Price	P-E ratio
FHP INTERNATIONAL	27¾	26
HEALTHSOURCE	43⅛	29
HUMANA	11	14
INTERGROUP HEALTHCARE	29¼	17
PHYSICIAN CORP. OF AMERICA	28	23
PHYSICIANS HEALTH SERVICES	14⅜	11
RAMSAY-HMO	30½	20
WELLPOINT HEALTH NETWORKS	27⅜	15

DATA: FURMAN SELZ INC., BUSINESS WEEK SURVEY OF ANALYSTS, BRIDGE INFORMATION SYSTEMS INC.

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BY GENE G. MARCIAL

A BIG BENEFIT FOR BENEFICIAL FROM THE IRS

Not everbody wants to keep the Internal Revenue Service away. Beneficial, the big consumer-finance company, wants the IRS to stay in touch, believe it or not. And when the IRS agreed, Beneficial's shares jumped from 67 to 73 in about a week.

What gives? Late last year, a dark cloud hovered over the stock as the IRS considered halting the practice of providing companies with a "lien screen," which identifies taxpayers who happen to have federal debt problems. The data enable Beneficial and other financial companies to screen applicants before granting them so-called refund-anticipation loans, equal to part or all of their tax refund.

On June 19, the IRS announced that tax-return preparers who offer electronic tax-filing services will continue to be notified by the agency if a customer owes money to the government. Taxpayers who owe money aren't eligible to receive tax refunds directly into their bank acounts, "so this lien screen is very important to Beneficial," says J. Frederick Meinke, an analyst at Raymond James & Associates.

That lending has been a big moneymaker, so the IRS decision "significantly improved" the earnings outlook for Beneficial, which specializes in loans to middle-class Americans, including second mortgages, credit-card borrowing, and personal loans. "Earnings in the second quarter appear to be better than we've been expecting," he says, in part due to the drop in interest rates.

CASH COW. Analysts say that if the IRS had turned the other way, Beneficial's 1994 earnings would have been cut drastically. They see revenues from tax-refund loans topping $50 million this year and rising to $55 million in 1994, vs. 1992's $36 million. Almost all of that money goes to the bottom line, say these pros. Next year, they estimate, refund loans could add about 50¢ a share to earnings. So eliminating them could have "cost" the company about a $1 a share in earnings.

Some pros think Beneficial will split the stock this year and also increase the dividend. Management has admitted to analysts that it's considering raising the current dividend of $2.80 a share. "All the fundamental trends at Beneficial are positive," says Goldman Sachs analyst Richard Goleniewski. Delinquencies, he adds, have been declining this year. Larry Eckenfelder, an analyst at Prudential Securities, sees the stock topping 90 over the next 12 to 18 months, based on estimated net of $8 a share in 1994, vs. $7 in 1993.

SMALL-TOWN DOCS, BIG-TIME PROFITS

Many hospital stocks have been ailing for quite a while, but not Health Management Associates. It's reflecting the company's upward momentum: From 18 in February, Health Management vaulted to 31½ a share on June 29.

Here's why. The company operates 16 acute-care hospitals in 16 Southeastern and Southwestern states, mainly in smaller towns. These hospitals have low-cost staffing, so their profit margins from government reimbursements for Medicare patients are wider than those of big urban hospitals. Also, they are benefiting from the government's current efforts to push health-care providers into underserved rural towns.

The company continues to acquire financially strapped hospitals in rural areas. "HMA has become expert in turning such unprofitable hospitals around, which has enabled the company to grow at 25% to 30% annually," says John Hindelong, a longtime hospital-management analyst now with Donaldson, Lufkin & Jenrette Securities. He notes that health-management organizations rarely touch small towns.

Considering the company's track record and opportunities for growth, says Hindelong, "we are confident that it will continue to increase earnings by as much as 40% annually." He thinks the stock should be in the high 30s, based on 1993 estimates of $1.60 and $2 in 1994, vs. 1992's $1.27.

Helen Wu, an analyst at Smith Barney, Harris Upham, adds that being a rural hospital, HMA will benefit from President Clinton's goal of providing quality health care in outlying areas.

SCICLONE MAY YET BEST THE SHORTS

The bold bears and raging bulls battling over SciClone Pharmaceuticals are likely to engage in another big fight soon. The company's flagship drug, Alpha Thymosin 1, has been under attack by the shorts, who say clinical studies have been limited and "overly optimistic." SciClone argues that its drug is effective against infectious diseases, such as hepatitis.

So far, the shorts have held the upper hand: SciClone's stock, which flew to $20 a share in early February from $7 a year ago, skidded as low as $12 in mid-June. It has since crept up to $15.

But the shorts may be in for some sleepless nights: Several pros insist that within days, SciClone will announce approval by the Food & Drug Administration and Japan's Health Ministry of the start of human testing in Japan. The FDA specifically authorized the export of the drug for clinical-trial use in Japan, focusing on chronic hepatitis B and C patients.

There are 4 million carriers of the hepatitis B and C viruses in Japan, notes SciClone Chairman and CEO Tom Moore. "Japan is one of our major targets for Thymosin, and the tests bring us closer to our goal," he says. "The incidence of hepatitis is higher in Asia than anywhere else." Schering-Plough's unit in Japan, Schering-Plough KK, will do the studies. Schering and SciClone signed a pact in January for Schering to develop, register, and market the drug in Japan. Schering will pay SciClone $35 million for development and clinical-trial use.

Clinical tests started in Taiwan early this year, and trials are to begin in Singapore by yearend. Moore figures SciClone will get approval in Singapore and Taiwan by next year. He's comfortable with Stamford Co. Senior Managing Partner David Hillson's estimate that SciClone will turn a profit in 1994, net $2.50 in 1995, with a leap to $5 in 1996.

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Automotive (6/86)	27.14	16.29	15.20
Biotechnology (12/85)	-13.41	23.56	16.86
Broadcast and Media (6/86)	22.56	14.36	15.16
Brokerage & Investment Mgmt. (7/85)	23.37	17.99	8.86
Chemicals (7/85)	4.38	12.63	18.68
Computers (7/85)	12.79	13.62	10.88
Construction and Housing (9/86)	18.11	16.05	13.92
Consumer Products (6/90)	7.20	NA	16.16
Defense and Aerospace (5/84)	8.54	5.64	6.27
Developing Communications (6/90)	24.37	NA	24.45
Electric Utilities (6/86)	25.94	16.94	10.16
Electronics (7/85)	22.76	14.50	5.24
Energy (7/81)	23.31	9.31	10.43
Energy Service (12/85)	36.39	5.65	2.41
Environmental Services (6/89)	-2.21	NA	4.81
Financial Services (12/81)	49.13	19.69	17.68
Food and Agriculture (7/85)	13.44	20.62	20.74
Health Care (7/81)	-17.42	18.67	16.41
Home Finance (12/85)	54.87	24.96	20.19
Industrial Equipment (9/86)	10.22	8.78	7.46
Industrial Materials (9/86)	9.50	7.28	10.10
Insurance (12/85)	35.42	21.05	14.18
Leisure (5/84)	20.22	13.28	18.79
Medical Delivery (6/86)	-21.10	19.82	10.22
Natural Gas (4/93)	NA	NA	NA
Paper and Forest Products (6/86)	6.78	8.08	9.73
Precious Metals & Minerals (7/81)	8.51	-1.87	-0.09
Regional Banks (6/86)	46.88	25.40	16.96
Retailing (12/85)	17.49	24.92	20.03
Software & Computer Services (7/85)	27.13	19.66	18.15
Technology (7/81)	16.27	17.01	7.02
Telecommunications (7/85)	29.07	19.72	19.95
Transportation (9/86)	34.77	20.75	15.59
Utilities (12/81)	27.56	17.97	17.24

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PERSONAL COMPUTERS

DELL COMPUTER GOES INTO THE SHOP

It's assembling a new executive team and retooling its business

For the legions of competitors that Dell Computer Corp. singed as it streaked to No. 4 in the personal-computer business, this is the moment they have been waiting for. The Austin (Tex.) company has seen margins shrink, withdrawn a secondary stock offering because of Wall Street's lack of interest, and killed off a line of ill-conceived notebook computers. Following a 48% decline in earnings in the first quarter, it has warned investors that profits will not match last year's levels for at least two more quarters. Its stock has plummeted from 49 in January to less than 20 in June.

Is the law of gravity finally catching hold of Dell? No way, insists Michael S. Dell, the 28-year-old CEO. "It's not the crime of the century," he says. "It's just physics. We grew 285% in two years, and we're having some growing pains."

DEBT AND CREDIT. So far, the pain isn't crippling. But Dell has seen the writing on the wall—and it's scary. Its low-cost approach to everything—from renting office space to assembling PCs—is beginning to wear thin. Doing things on the cheap enabled Dell to undercut such rivals as Compaq Computer Corp. and IBM, but it can't keep up with the needs of a $2 billion, 5,600-employee company that sells PCs in 95 countries. And its tightfisted style is sorely inadequate for the changes Dell is planning, including bringing more assembly in-house and moving beyond 800-number sales and discount stores to the computer dealers and systems integrators.

VICE-PRESIDENT FLAIG: AIMING TO BOOST MANUFACTURING PRODUCTIVITY BY 25%

So in a matter of months, Dell is scrambling to put in place the kinds of systems and management controls that usually take years to develop. Michael Dell says he is hiring new managers, creating new organizations, and building the new facilities that will give the company the infrastructure to take Dell to $10 billion in sales.

Sounds good, but all of this takes money, and that's in short supply. Closed out of the public-equity market, Dell is meeting its cash needs through a costly combination of debt and credit. And it can't wait for Wall Street to warm up to a new stock issue. "They've been starving infrastructure," says Eckhard Pfeiffer, CEO of archrival Compaq Computer Corp. "They have to open up the purse and say, 'spend, spend, spend' until they have it fixed," he says.

TOP TALENT. Michael Dell is already spending. In the past few months, he has hired a crew of new managers (table, page 140), doubled the budget for internal information systems to link every Dell operation, and sketched plans to build new assembly plants around the world. But the basic thrust remains the same: to increase U. S. market share rapidly from today's 4.1% to as much as 18%. He won't say when he can hit that goal, but he says boosting market share is the best way to ensure survival in a rapidly consolidating industry. "The model is fine," says Dell. "Was it a good strategy to hit the fast-forward button? My answer is yes. Could we have planned better? Sure."

To fix that, Dell is counting on new managers with big-company experience. Since November, he has rebuilt his management with four new top executives and about 10 high-level managers. The list includes three Compaq veterans who helped create that company's Dell-bashing ProLinea line. Dell also has added three new outside board members and says he will hire more than a dozen "impact players" in coming weeks. Overall, the hiring binge, which added 1,700 employees last year, is slowing. Dell will soon add just 10 or 15 employees a week instead of 65, says Chief Financial Officer Thomas J. Meredith, who arrived in November from Sun Microsystems Inc.

The new executives are busy redesigning many of the company's key processes, from product development to shipping. For example, L. Scott Flaig, a former Ernst & Young consultant who was hired as senior vice president for worldwide operations in December, says his goal is to improve manufacturing productivity by 25% by yearend.

Nice goal if you can make it. But while Dell strives for efficiency, it is also pursuing the CEO's growth goals. To grow 50% this year, to $3 billion in revenues, the company needs to boost shipments—while keeping a tight grip on costs. And it already has little wiggle room. Since last year, when first Compaq, then IBM began chasing it with low

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cost models, Dell's net margins have slipped. In the latest quarter, Dell took a $20 million charge after John K. Medica, the new vice-president for portable products, killed off a planned line of notebooks. That dropped net margin to 1.5%. Even before the write-down, however, margins were below Dell's target of 5%. Meanwhile, Compaq, despite dropping prices to Dell's range, still manages a 6.4% net margin.

Shrinking margins could choke off earnings and crimp Dell's expansion plans. Analysts say it has enough cash and credit to last at least another year, but many wonder if the company has the resources it needs to keep pace, should the battle for market share intensify. To bolster finances, CFO Meredith has launched a three-part financial strategy to improve cash flow and raise funds. First, Dell has cut interest expense by reducing its credit line from $175 million to $130 million. Then, in late June, it sold $100 million worth of receivables. Part three: The company is talking to banks about private debt placements.

CEO DELL: A BURST OF HIRING

The new funds may be spoken for. Operating expenses, as a percentage of sales, will rise over the next two quarters as the company builds up its infrastructure, says Flaig. He already has been investing money to beef up some critical processes that have been done the same way since the company was small. Take logistics. Dell assembles most of its computers from a range of parts from suppliers around the world. It uses 20 airfreight carriers to deliver these wares to its Austin headquarters. From there, the parts are redistributed around the world for final assembly. That will change this summer, when the company chooses one carrier each for Europe, Asia, and the U. S. to stock regional staging depots. This should save $10 million a year, says Flaig.

NEW PLANTS. To make distribution more efficient, Dell is putting plants into new growth regions such as Mexico and Japan. Dell is particularly eager to beef up its presence in Japan. Since entering the Japanese market last fall, the company has had trouble meeting a torrent of orders. And Dell is attempting to create more demand in Japan: On June 28, it cut prices by 9% to 23%.

In addition, Dell is also scouring Malaysia and Singapore for a location to build a 50,000-square-foot factory by 1994. More proof, says CFO Meredith, that Dell is not retreating. "You don't make these kinds of investments unless you intend to become a dominant player."

But Dell faces some immediate problems—such as filling the gaping hole where its notebook PC business used to be. Medica, who joined in March, had been a key player in building Apple Computer Inc.'s PowerBook notebook computers into a $1 billion business. He took one look at a new series of notebook models on Dell's drawing boards and realized that by the time the company could get them on the market, they would not be competitive.

Now, Medica is working on getting Dell back in the fast-growing notebook game. Because of its lackluster lineup—it never fielded a notebook using Intel's 486 microprocessor, for example—Dell's notebook sales represented only 6% of Dell revenue for the first quarter, ended May 2. Other PC makers get 20% of revenues from notebooks, and for Compaq they're 30% of the business. So Medica is considering a range of options, from designing a new product in-house to selling another company's machines. A Japanese industry insider says Dell is about to sign Sony Corp. to build new notebooks, replacing the Taiwanese supplier it used before. Dell denies it has tapped Sony, while Sony declines to comment.

"AVOWED ENEMY." Meanwhile, back in marketing, Dell is looking for new channels through which to move its products. For most of its nine-year history Dell has ridiculed computer dealers as overpriced middlemen. Now, it realizes that to hit its growth goals, it can leave no channel untapped. It has been selling through mass-merchandise retailers for several years and recently added such chains as Wal-Mart Stores, Sam's Club and Price Club.

But snaring traditional dealers won't be easy. These stores still sell almost 40% of the PCs shipped in the U. S., and they are skeptical of Dell's overtures. "From Day One, Dell has been the avowed enemy of the dealer channel," says Avery More, president of Computcom Systems Inc. in Dallas. "It's one thing to burn your bridges behind you. It's another to burn them in front of you." Besides, these days there are few compelling reasons for dealers to carry Dell. Its products differ little from its rivals', and if it keeps prices low—which it must do to compete with IBM and Compaq—it's hard to figure how Dell can offer dealers a profit.

One thing Dell can rely on: the continued and supreme confidence of its leader. "We don't have declining revenues, bloated inventories, or any of the signs of a sick company. These are not blow-up-the-company issues," says Michael Dell. Or as Dell President Joel J. Kocher puts it: "We grew 85% in the first quarter and have yet to taste red ink. I refuse to apologize for 85% growth."

All those new hires must be hoping there won't be any need for apologies.

By Peter Burrows in Austin, Tex., with Stephanie Anderson Forest in Dallas and bureau reports

FILLING THE CHAIRS: DELL EXECUTIVES HIRED SINCE OCTOBER

Title at Dell / Previous job	Title at Dell / Previous job
THOMAS J. MEREDITH Chief Financial Officer Sun Microsystems Treasurer	**DENNIS PASSOVOY** VP, Advanced Systems, Dell USA Evernet Systems VP, Technical Services
L. SCOTT FLAIG Senior VP, Worldwide Operations Ernst & Young consultant	**CHUCK CHESHIRE** Corporate Director, Quality Private consultant
THOMAS L. THOMAS Chief Information Officer Kraft Commercial Products CIO	**KEVIN O'CONNOR** Director, Human Resources Frito-Lay Human Resources Mgr.
ERIC HARSLEM Senior VP, Product Group Apple VP, Macintosh Desktop Div.	**SEAN BURKE** Director, Product Marketing Compaq Head of ProLinea Marketing
JOHN K. MEDICA VP, Portable Products Apple Senior Director, Portables	**JOHN THOMPSON** Director, Portable Products Compaq Head of ProLinea Development
STEPHEN C. MARTSON VP, Worldwide Procurement AMP Purchasing Manager	**KEITH MAXWELL** Director, Portable Engineering Compaq Head of ProLinea Operations
CHRIS GOPAL VP, Operations Ernst & Young consultant	

DATA: DELL COMPUTER

TCHES

AT TIMEX, THEY'RE POSITIVELY GLOWING

uminescent dials and pricier styles show a lot of promise

n 1982, a Swiss company approached Timex Corp. and asked it to do worldwide marketing for a new prod-. Timex executives passed, believing e garish plastic timepieces wouldn't l. You guessed it: They were Swatch- destined to score a fashion megahit. w, Timex President C. Michael Jacobi mits having made "a big blunder."

Such mistakes used to be common at e watchmaker. The industry leader ce 1960, Timex, based in Middlebury, nn., was resting on its laurels, crank- g out the simple, low-cost watches at were its bread and butter. When gital technology revolutionized watch- in the 1970s, Timex stuck to analog nepieces, losing money and market are. "One of the problems of compa- s with successful pasts is that they of- n get mired in that past," says Jacobi.

SHION SENSE. Jacobi, who became mar- ting vice-president in 1981, began rking to snap Timex out of the past. stead of writing off consumers' de- es as passing fads, he beefed up mar- t research. Fashion consultants from ew York and Paris now visit twice a ar to give previews of clothing styles the coming six months—trends that ght translate into watch styles. Jaco- and other executives also regularly avel to retailers and trade shows in ner industries, such as sporting goods, sniff out fashions. And in 1989, he gan opening Timex stores, now in ght cities, that act as test markets to lp assess products and pricing.

Timex has capitalized on that home- ork since the 51-year-old Jacobi be- me president in 1992. Its big error, cobi says, was failing to keep up with e watch's evolution from a functional ject to a fashion accessory. Japanese vals such as Seiko and Citizen were roducing a wide variety of styles in a owing price range, figuring consumers would want different watches for different looks. They were right: According to the Jewelers of America, the average consumer today owns five watches, compared with one-and-a-half 30 years ago. Says Jacobi: "We were struggling along with a one-brand company while the rest of the industry was going multibrand."

To expand its lineup, Timex in early 1992 bought rivals Guess and Monet Jewelers, gaining a presence in upscale department stores. Early this year, it licensed its name for a line of wall clocks and clock radios, due out this summer. A deal with Nautica Apparel Inc. in May gave Timex its first dressy men's watch. And last month Timex started making watches with Disney movie characters, such as Snow White. Both new lines will be in stores later this year.

But Jacobi says the biggest revenue jump will come from Indiglo. Introduced last November, this patented technology uses energy from the watch battery to excite electrons in the watch face, lighting up the entire dial. Unlike other luminescent watches, an Indiglo doesn't need to be charged by exposure to the sun or a lamp. How well does it work? When New York City's World Trade Center was bombed in February, a man led a group of stranded people down 34 darkened flights of stairs with his Indiglo. Timex plans to spend its entire $10 million ad budget this year on television and print ads for Indiglo and will use the technology in 20 to 30 watch styles.

Timex' product line now totals 1,500 styles, up from 300 in 1970, ranging in price from $20 to $300. After the sports-watch craze began, the company in 1985 introduced its Ironman, now a Bill Clinton favorite. A plastic line called Watercolors was developed to counter Swatch. Then, deciding that fashion would turn conservative again, Timex brought out Carriage, a line with a more classic look.

RISKY LEGACY. The strategy has brought sales increases at Timex while the rest of the industry stays flat. Jacobi says sales were up 15% in 1992, and he expects another 15% jump in 1993, to $500 million. Timex, which is wholly owned by Norwegian investor Frederick Olsen, won't disclose data on profitability, but Jacobi says it has been "reasonably profitable" since 1984. He adds that its total market share is around 30%, up a couple of percentage points since the mid-1980s.

Much of Timex' newfound energy is due to a structural overhaul that speeded product development. Jacobi says the company he joined in 1970 was a "slow-moving organization." When he took over, he split up the company along product lines, creating separate business units for sport, fashion, and core Timex watches and giving each one autonomy over design and development. One payoff: The Fashion & Children's Watch Div. churned out the Disney line in just six months, down from as long as two years before the reorganization.

With all the changes, Timex' most valuable asset may still be its brand. The 1992 Gallup Watch Brand Survey found that 98% of consumers knew the Timex name. Seiko came in second, with 87%. But that recognition is a legacy of Timex' illustrious history. And as Jacobi knows all too well, a dazzling past can be risky if it blinds a company to the present.

By Chris Roush in Middlebury, Conn.

KEEPING TIMEX TICKING

Acquiring the Guess, Monet, and Nautica names gives it an entry into upscale stores.

Indiglo watches use patented technology that will show up in more than 20 watch styles this year.

A line of wall clocks and clock radios will soon roll out, thanks to two new licensing agreements.

A new computer system helps retailers manage inventory. Stores send Timex sales data daily.

PHOTOGRAPH BY CHR. S. ABBOTT ILLUSTRATION BY FRANK O'COUNNELL

Commentary/by Paul Magnusson

WHY CORPORATE NATIONALITY MATTERS

The question that U. S. Trade Representative Mickey Kantor posed to several of his fellow Cabinet members this spring seemed simple: "Who are my clients—American companies or American workers?" But months later, President Clinton's economic policymakers are still arguing over Kantor's innocent inquiry as they hash out trade, technology, and industrial policies. The potential stakes: billions of dollars in tax breaks, government research funding, and subsidies.

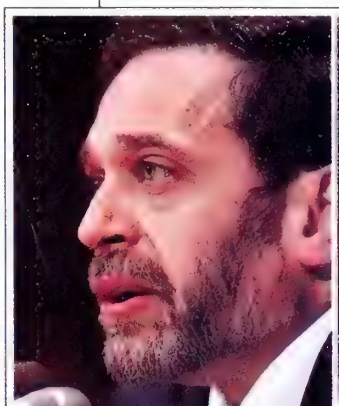
Two close friends and philosophical antagonists stand at the poles of the debate. Labor Secretary Robert B. Reich believes it no longer matters much whether foreigners or Americans own companies doing business in the U. S. Council of Economic Advisers Chair Laura D'Andrea Tyson thinks national ownership makes a lot of difference.

Long before the two took their places at the Cabinet table, they argued their cases in journals, books, and magazine articles. But the controversy has grown more intense now that its resolution could affect everything from military security to state tax credits to foreign trade zones.

In a recent debate in Kantor's office, Reich insisted that U. S. policy should give incentives to both American and foreign manufacturers to locate in the U. S.: "In the emerging global economy, we ought to look at 'who does what where, rather than who owns what.'" Not so fast, replied Tyson. American policy must allow U. S. multinationals the freedom to invest wherever it makes sense. "Maintaining technological leadership and production capabilities in the U. S. may depend on having some operations abroad," she says.

OPEN ARMS. Who's right? Reich's argument, advanced in his latest book, *The Work of Nations: Preparing Ourselves for 21st-Century Capitalism*, has a reassuring, egalitarian ring that befits a Labor Secretary: Value the workers over the stockholders. But Reich's open-arms approach to foreign investment falters in an important respect. Japanese multinationals, the largest investors in the U. S. over the past 10 years, aren't reading from the rule book that Reich and many traditional economists are so fond of quoting.

Tyson offers the more subtle—and probably the better—line of reasoning. She focuses more on the kind, rather than the sheer number, of jobs that are being created by transplants to the U. S. And she fears that some of the foreign-owned affiliates are displacing U. S. workers, gathering valuable U. S. technology, and even benefiting from government-sponsored research. Meanwhile,



REICH SAYS IT IS CRUCIAL TO ENTICE BOTH FOREIGN AND DOMESTIC COMPANIES TO LOCATE IN THE U.S.

BUT TYSON SAYS U.S. COMPANIES NEED THE FREEDOM TO INVEST WHEREVER IT MAKES SENSE

American companies and workers might be better off if foreign countries eased their restrictions on investment by U. S. companies—even at the risk of more production moving offshore. "You can't say that if Boeing decides on a foreign partnership with a European company that this is bad," she says. "It may be part of Boeing's survival strategy and ultimately good for America."

Until the argument is settled, Kantor's top priority is protecting the interests of U. S. corporations that produce at home and sell American-made abroad. U. S. manufacturing oper of foreign companies are second i U. S. companies that have moved facturing abroad are at the bottom

HOME-COUNTRY BENEFITS. But this ple hierarchy is outmoded. For exa Reich wrote to the Federal Comm tions Commission suggesting it ch high-definition-television standard in part on which system would "the greatest contribution to do high-wage employment." Zenith Ele ics Corp.—which assembles many TVs in Mexico—protested to Reich the FCC. The issue, argue nith Chairman Jerry K. man, should not be wher high-tech TVs are assemble where the semiconductor ry originates. He warne while a competing Eur consortium may assemb in the U. S., the high-valu ed jobs—creating the inn would remain in Europe. meanwhile, promises to b components from Am Telephone & Telegraph Florida and Pennsylvani factories. Yet under Ka guidelines, Zenith might below the European comp policy priority.

Among America's t partners, the Japanese ce believe that ownership matters. F ample, Tokyo contends that semic tors and computers manufactured pan by affiliates of U. S. compani "foreign imports" because the fa are foreign-owned. And when an can company in Japan puts its plate on a chip made in Japan by anese company, bureaucrats ther count it as an import.

And when the Japanese build abroad, they go all out to preserv ership rights, keeping managem trol—and the best-paying for themselves. A June study by KPMG Peat M shows that Japanese trans are twice as likely as Eu affiliates to place one o own countrymen as CEO. nese companies in the U. S create the high-wage desi engineering jobs for Am that Reich assumes, eith

FOREIGN OWNERSHIP: ITS RIPPLE EFFECT

Reich says only job creation is important—not who creates the jobs. But corporate domicile, particularly with Japanese businesses, can have spillover effects, such as a high structural trade deficit. Japanese companies in the U.S. use Japanese suppliers far more than American companies in Japan use U.S. suppliers.

EXPORTS FROM FOREIGN PARENTS TO U.S. AFFILIATES*	TOTAL (BILLIONS)	PER WORKER	EXPORTS FROM U.S. PARENT TO FOREIGN AFFILIATES*	TOTAL (BILLIONS)	PER WORKER
FROM ALL COUNTRIES	$136.7	$29,040	TO ALL COUNTRIES	$89.6	$17,228
FROM JAPAN	73.2	118,660	TO JAPAN	7.1	49,846

*1990

DATA: COMMERCE DEPT.

often than European subsidiaries, Jap- factories in the U. S. are assembly where lower-skilled workers assemble n-made parts, overseen by home-coun- anagers. Japanese subsidiaries import ne U. S. nearly three times the compo- that European affiliates do as a per- ge of final sales, according to a 1990 nerce Dept. report (chart).

e result: a structural trade deficit. Con- to original expectations, the fivefold se in foreign direct investment in the during the 1980s likely helped to in- e the trade deficit. The reason: About of the merchandise trade deficit con- of imports by foreign subsidiaries into . S., the Commerce Dept. says.

NG PROFITS. Japan's vertically inte- d companies can also escape U. S. tax- re easily. By charging itself high pric- r the parts it ships from its own ies in Japan, the U. S. subsidiary can showing a profit within the U. S. Prof- nd the tax revenues—are shifted back . Clintonites estimate that the loss transfer-pricing abuses runs up to $15 yearly. A recent Internal Revenue ce study of 3,357 foreign-controlled rations discovered that 55% understat- come on their tax returns. Japanese anies understated their income more ently than any of America's other top ding partners.

ch's argument is also vulnerable be- some of his facts are wrong. In a to the President last spring, Reich ed that "close to 75% of the chips that purchased last year from U. S. firms fabricated in Japan." The U. S. Semi- ctor Industry Assn., however, insists more than 80% of the U. S.-branded are American-made. "Reich just turns thing on its head," says Michael C. ch, director of government relations tel Corp.

e Clinton Administration has proposed ing down on tax shifting by foreign rations and removing tax incentives naway plants. But it seems disinclined to restrict foreign investment gener- Despite the tax cheating, "we should be g as much as possible to encourage gn investment here," says Deputy ury Secretary Roger C. Altman.

haps. But the extent and pace of for- nvestment are raising questions that mics textbooks never covered, and 's one-way-door solution simply is not swer. It's time to make some sense of ica's scatterbrained industrial policies a flexible approach to foreign invest- in the U. S. and American investment d.

l Magnusson covers economic policy SINESS WEEK from Washington.

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DRUGS

HAS SYNTEX RUN OUT OF STEAM?

Wall Street is impatient with sluggish sales and few new products

Not so long ago, Syntex Corp. was on the cutting edge. In the 1950s, its scientist-founders invented the birth control pill, which helped usher in the sexual revolution. By the mid-'70s, it had another blockbuster, naproxen. That arthritis pain reliever fueled steady growth at Syntex and last year accounted for 48% of its $2 billion in sales and an even larger share of its $472 million in earnings. Naproxen's patent runs out in December, but Syntex had new products ready. So 16 months ago, with the stock at 50, drug analyst Neil B. Sweig titled a report: "Buy now to catch the dawn."

These days, dawn looks more like dusk. In its fiscal third quarter, ended Apr. 30, Syntex took a $140 million charge to pay for a restructuring and layoffs, cutting share earnings to 18¢, from 56¢ a year ago. Analysts say profits this year could be down as much as 7% to 10%, and by late June, Syntex was trading around 18½—a plunge in shareholder value of $8 billion-plus since January, 1992.

It is the future that worries analysts and investors most, however. About 65% of Syntex' U. S. sales come from drugs whose patents will expire by 1995, one of the highest rates in the industry, says analyst Hemant K. Shah. When a lucrative drug's patent runs out, sales typically plunge 30% to 35% the first year and 20% or more after that as generics gain momentum. Syntex seems ill-prepared to rebound. Sales of its newest products have come up short. It has no major drugs due out soon, and it has not brought in sufficient backup products from the outside.

Syntex has other problems, too. On June 2, a Food & Drug Administration advisory committee refused to recommend a version of naproxen for sale over the counter. Like many drugmakers, Syntex is curtailing price increases to deflect heat from Washington. And its unique tax status as a Panamanian company even makes it hard to merge. Though Syntex has approximately $700 million in cash and short-term investments, "there is no reasonably bright future for this company," says Sweig of Capital Institutional Services Inc.

CEO Paul E. Freiman, other Syntex executives, and directors all declined to be interviewed for this story, though Syntex answered some questions in writing. In refusing interviews, Syntex said it was "offended" that BUSINESS WEEK delved into criticism from analysts, former employees, and competitors that changes in Freiman's personal life had affected his running of the company.

Wall Street began to sour on Syntex in mid-1992, as it became clear that its stroke-preventive Ticlid, introduced in 1991, and its pain medication Toradol, which came out in 1990, weren't meeting expectations. Some analysts had predicted 1993 sales of up to $300 million for Ticlid. But it failed to gain much ground against far cheaper drugs, such as aspirin. Now, analysts say its annual sales are likely to be about $50 million.

"A HAT SIZE." Analysts still think Toradol, which can be injected or taken by pill, could hit $500 million in annual sales. But there's no telling when. Syntex bungled its launch, analysts say, producing too little injectable Toradol to meet demand and failing to push the tablets hard enough in a crowded market: Tablet sales were just $43 million in fiscal 1992, about half many predictions. Syntex says total sales of Toradol have risen sharply, to $241 million in fiscal 1993's first nine months. Sweig adds, however, that boosting sales required more intense marketing, which cut margins. Jim Garamone, assistant director of New York University Medical Center's pharmacy, explains the need for the hard sell: "I don't see a significant advantage over other drugs that have been on the market longer."

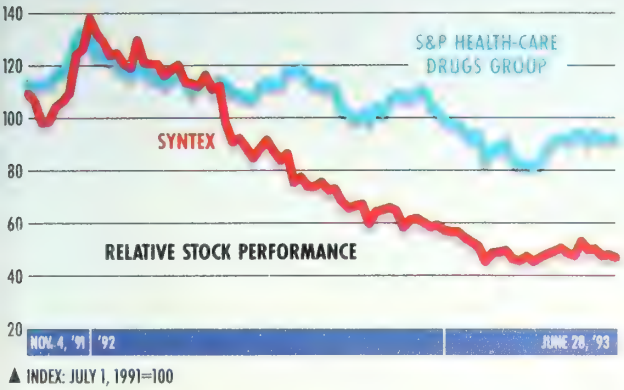
That isn't the only wild card for Toradol. Citing side effects, especially intestinal bleeding, German officials alerted Syntex on June 11 that they would revoke its license to sell the drug there. The company "disagrees" with the action, and a U. S. researcher doing a Syntex-backed study says the Germans are "misinterpreting" unpublished data. Some 75% of Toradol's sales are in the U. S., but analysts now worry about its reputation. "If anything happens to Toradol," says one, "this stock's a hat size."

Part of Syntex' insurance against such problems was its 1988 deal with

CRITICS SAY CEO FREIMAN SEEMED TO BE CAUGHT OFF GUARD WHEN SALES WANED

WHAT'S AILING SYNTEX

Since early 1992, the market value of Syntex shares has dropped by more than $8 billion. Here are some of the reasons:



DATA: BRIDGE INFORMATION SYSTEMS INC.

SALES GAP Patent protection for Syntex' billion-dollar Naprosyn —about 50% of its sales —will expire in December. Sales of Syntex' newer products—the painkiller Toradol, the stroke-preventive Ticlid, and the endometriosis drug Synarel—have not met expectations.

DISAPPOINTING EARNINGS The company took a $140 million charge to earnings for the third quarter, ended Apr. 30, to pay for restructuring costs and layoffs. That cut earnings to 18¢ a share, vs. 56¢ a year ago. The move followed a similar first-quarter $180 million charge.

NEW-PRODUCTS DROUGHT Syntex will have no big new drugs ready for market until at least 1996.

PRICE PRESSURES Last August, Syntex raised prices 3.8%, the first hike in 16 months. To fend off criticism, Syntex has pledged to keep average price increases at or below the Consumer Price Index.

REGULATORY WOES Analysts predict that approval for Syntex to sell Naprosyn, its flagship drug, without prescription will be delayed at least a year.

DATA: COMPANY REPORTS, BW

Procter & Gamble Co. to sell naproxen over the counter. But the FDA committee found that studies Syntex did on proposed doses for the unprescribed medication were poorly designed and inconclusive, says Randy P. Juhl, dean of the University of Pittsburgh's school of pharmacy and chairman of the committee. Analysts say FDA approval could be a year away. Syntex says the FDA is still actively reviewing the drug.

TOO CHOOSY? In theory, none of this should have happened. Since 1987, Syntex has spent more than 15% of annual sales on research and development, a high rate in the drug industry, in a search for hits in heart disease, cancer, and infectious diseases. But some former executives say the R&D was inefficient—what one calls a "shotgun" approach. And, they add, Syntex often failed to pull the plug early enough on weak products. For instance, it poured more than $100 million into the anti-ulcer drug enprostil in the late 1980s before shelving it because it couldn't compete with existing drugs. Now, analysts say, Syntex' best hopes for big products—an oral version of its antiviral drug Cytovene and a drug to fight organ transplant rejections—won't be out until at least 1996.

Former executives, competitors, and collaborators see another culprit in Syntex' decline. They say it only slowly embraced biotech, which is boosting the fortunes of such rivals as Hoffman La-Roche and Pfizer. Alejandro Zaffaroni, a Syntex co-founder who left in 1968 to start Alza Corp., says that left Syntex in the same bind as many drugmakers. "They could always make me-too drugs or raise prices" to generate revenues, he says. But that no longer works because the pressure to control health costs is making drugmakers come up with novel, cost-effective compounds.

On top of all else, former executives say, Syntex didn't license in enough drugs that could have rounded out its product lines. Pieter Bax, a 25-year veteran of Syntex' corporate development group who left in early 1992, says management wanted to license only blockbusters. "They weren't willing to accept second- or third-choice products," he adds. "That's where the company fell apart."

It moved slowly on joint ventures, too, say more than a dozen biotech executives. Frank F. C. Kung, CEO of Genelabs Technologies Inc. in Redwood City, Calif., says that after nine years of discussions, "we still have been unable to strike a deal." Genelabs has inked deals with a half-dozen other drugmakers in the interim. Syntex does have two promising biotech collaborations—with Synergen in neurological drugs to fight such ills as Alzheimer's, and with Agouron to explore cancer and arthritis medications. But products are years away. In response to criticisms of its R&D, licensing efforts, and collaborations, Syntex says that it sells several drugs it has licensed, that it embraced biotech in 1985, that it has several agreements with biotech companies, and that it is trying to make go, no-go research decisions earlier. The company provides no explanation for its nearly empty pipeline.

> Despite its history of innovation, Syntex failed to embrace new technologies, as its rivals did

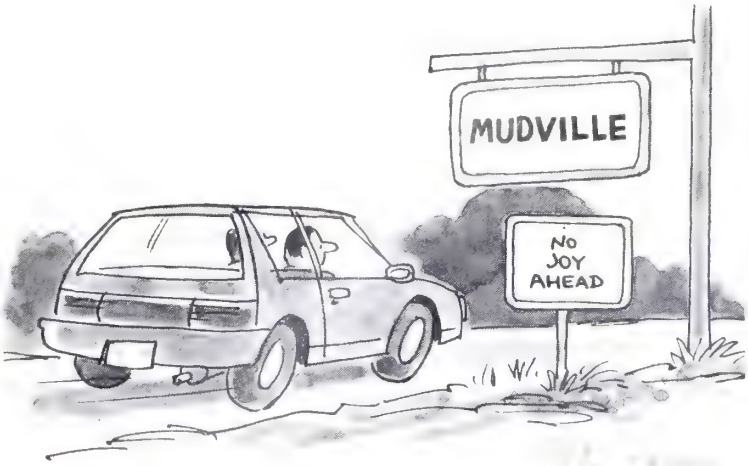
Syntex has enough cash on hand to get products through licensing or other deals. But finding lucrative near-term opportunities is tough, industry sources say. Other companies facing Syntex' challenges have found suitors and merged. But the company's incorporation in Panama, which has buoyed profits by holding its tax rate to less than half that of its U. S. rivals, makes a merger unlikely: Analysts say a U. S. buyer would lose the benefit, which could also complicate a sale to a foreign buyer. Syntex wouldn't discuss its Panamanian status or potential mergers.

WEAK ROLLOUTS? In fact, the company's main strategy now seems to be cutting costs. Both last November and in late May, Freiman said Syntex would slice 2,200 jobs—some 20%—by 1995, primarily in manufacturing. The 58-year-old former pharmacist also pledged to boost sales and streamline research. He has a reputation as the one to lead such efforts. A personable, blunt-spoken New Yorker, he can "really pull people toward a target," says one former executive. Wall Street has applauded his attack on costs and doesn't blame him for the pipeline problems, since he took over only in 1989.

Still, several analysts and former executives are disappointed that Freiman, the first Syntex CEO to rise through sales, muffed the rollouts of Ticlid and Toradol. "Management dropped the ball," says PaineWebber Inc. analyst Ronald A. Nordmann, a former Syntex bull. Indeed, current and former Syntex employees, analysts, shareholders, and even industry executives say that Freiman, who was bullish on the company's prospects in early 1992, seemed to be caught off guard when sales flagged. And the critics blame this at least partially on two distractions.

For one, Freiman has spent the past year as chairman of the Pharmaceutical Manufacturers Assn. The post was particularly time-consuming, fellow board members say, especially given the pressure on the industry from the Clinton Administration. In a written response

FRANK O'CONNELL



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to BUSINESS WEEK, Syntex said Freiman's PMA post was an "honor" and that "everyone gains from effective leadership of a trade association."

Several current and former executives also cite Freiman's separation, then divorce, from his wife of 36 years, all about the time he began appearing in public with a woman from Brazil, whom Syntex says he recently wed. The executives say Freiman made frequent trips to Brazil on the corporate jet, which according to the company's bylaws may be used by executives and directors for personal trips. In fiscal 1992, ended July 31, Freiman's personal use of the jet and other perks amounted to $98,304 in benefits, according to Syntex' latest proxy. That amounted to about 10% of Freiman's total compensation for 1992 and was triple his use of perks the previous year. Syntex wouldn't comment on Freiman's personal life or use of the jet except to say that he "has been working tirelessly" on the company's behalf.

Syntex' treatment of Wall Street analysts hasn't aided its cause much. Even in the tight-lipped drug industry, analysts complain, Syntex is unusually unhelpful in deciphering its numbers. That may be one reason its stock is so low, says Joyce Albers of First Boston Corp. Adds Paul A. Brooke, a managing director at Morgan Stanley & Co.: "The inaccessibility of management is a liability for Syntex." Nine shareholder suits filed last fall also charge that Syntex made little effort to tone down bullish forecasts in early 1992. Syntex says it meets often with analysts and considers the suits without merit.

NO COMMENT. In July, Syntex is expected to lay out more details of its restructuring plan. BUSINESS WEEK posed questions to its directors on the company's strategy, recent difficulties, Freiman's leadership, and whether Freiman still has the board's confidence. No directors responded, though a Syntex spokeswoman noted that the board reelected Freiman unanimously last January. Indeed, some shareholders and analysts say they don't expect bold actions from the close-knit board. They note that 6 of the 11 directors are current or former Syntex executives, and three have been board members since 1957.

Despite Syntex' travails, Freiman still exuded confidence when he addressed the PMA in March. He began his speech with an anecdote about the captain of the dirigible Hindenburg, who supposedly asked: "Is it hot in here—or is it me?" From now on, it's a question Freiman may be asking himself.

By Joan O'C. Hamilton in Palo Alto, Calif., with Joseph Weber in Philadelphia and Julie Tilsner in New York

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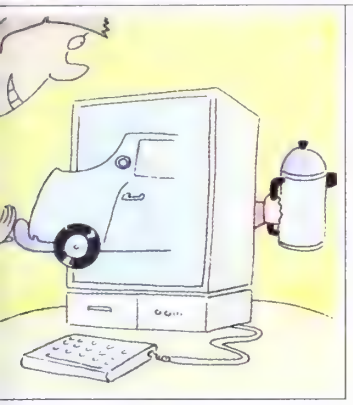
ED BY PETER COY

AKING THE GUESSWORK UT OF RECYCLABLE DESIGNS



There probably never will be an automobile that's 100% recyclable, because dismantling it and reusing every tiny part would cost more than building a car from scratch. But a new program called ReStar helps design products for the most recyclability at the lowest cost. ReStar was written by D. Navin-Chandra, director of Carnegie Mellon Univer- y's Concurrent Engineering Laboratory. It tells, for exam-, when it makes sense to attach pieces with screws instead with spot welds so they can be easily taken apart and ised, or when to spend extra to use a metal such as alumi- m that is highly recyclable.

Navin-Chandra has used the prototype software to help rd Motor Co. and IBM, among others. He says ReStar is best companies that lease out their products and get them k when they're worn or obsolete, because these companies ve the strongest interest in maximizing recyclability. As the cycles of high-tech products shorten, Navin-Chandra pre- ts that parts recycling will become more and more common.

OORS: FROM BEER O SUPERSTRONG BUTTONS

lenty of people have been irritated by broken buttons, but it took a beer magnate to do something about it. Joe ors Jr. says he got the idea for an indestructible button m a *New York Times* article in 1989, and he ordered one to made by the ceramics unit of Adolph Coors Co., the brew- company that his family runs. The research team, headed Connie Cameron, came up with a ceramic button made of conium oxide, which Coors says is harder than steel and has times steel's flexing strength.

The Diamond Z buttons are fired at a temperature of 00F, polished, and then coated—in an exclusive process t makes them look like ivory. Coors says they withstand re- ated washing and ironing as well as the "drop test," where- a heavy pointed rod falls down a long tube onto a defense- s button. ACX Technologies Inc., which was spun off from ors in December, has been selling the buttons to Nordstrom . since last September, and several lines of higher-priced n's shirts now carry them. One big drawback is price: Di- ond Z buttons cost 7½¢, or 15 times the ½¢ price of a ndard button.

IE APPLE OF THIS AMERA'S EYE IS BRUISED

ne bad apple really can spoil the whole barrel. But a pro- totype computer-vision system from Cornell University pick it out and send it off to be made into cider or apple- ce before it makes the other apples rot. The Cornell system s a video camera to measure how apples reflect scattered invisible light of near-infrared wavelengths. "The apple's surface is like a mirror," says research support specialist James Throop, but bruised spots absorb more light. "If cells are broken or disrupted, fluid is released, and less light is reflected back," he says.

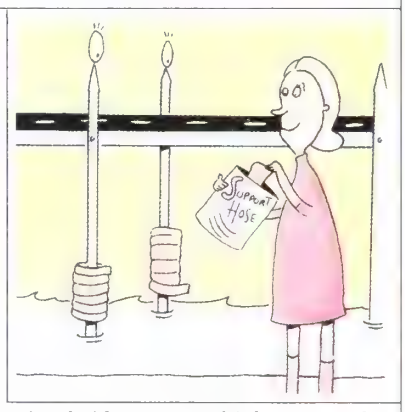
Throop has been working on the concept since 1980 with Gerald E. Rehkugler, associate dean of engineering for undergraduate programs, and Bruce Upchurch, an Agriculture Dept. scientist. But it wasn't until this year that the three got the camera to work with 70% accuracy at a rate of six apples per second, which is fast enough to be commercially practical. But getting the handling system to go that fast will take at least three more years, Throop says. Today, human graders sort apples by color and size and reject obviously bad apples. But they don't even try to pick out bruised ones: They're too hard to spot.

TOWARD A *GRANDE ALLIANCE* ON GLOBAL HDTV

Can the world agree on a standard for the next generation of television? That remains to be seen, of course, but a number of influential communications regulators are clearly hoping it can. The U. S. has the world's most advanced standard for transmission of high-definition television (HDTV), using the digital language of computers. Now, the Europeans are wondering whether they should switch to a digital transmission standard from their current analog one.

French Communications Minister Michel Pelchat proposed the development of a world standard for HDTV at a June 14 conference at Montreux in Switzerland. U. S. Federal Communications Commission member Ervin S. Duggan picked up on the idea—which he referred to as a "*très grande alliance*." Duggan said interested countries could set up a formal procedure for trading information on HDTV. And, he said, it might require "a kind of Supreme Allied Commander of advanced television" to manage the standard-setting process.

CAN AIRCRAFT COMPOSITES BEEF UP SUSPENSION BRIDGES?



Forget about just beating swords into plowshares. XXsys Technologies Inc. in San Diego is leading a consortium of defense contractors and high-tech companies that want to make bridge and road construction materials out of the lightweight, ultrastrong materials that are used in the B-2 bomber and other aircraft.

XXsys wants to build a 450-foot, two-lane suspension bridge over a highway on the campus of the University of California at San Diego. So far, the consortium, which includes a unit of Lockheed Corp., has raised only a fraction of the $55 million cost, but it's seeking government defense-conversion aid for some of the rest. In the meantime, XXsys is trying to get California's Transportation Dept. to use composites instead of steel jackets to earthquake-proof the columns of existing bridges and overpasses. But composites have never been mass-produced before, so the economics of using them in large quantities isn't known.

M.E. COHEN

Commentary/by Stan Crock

RADICAL SURGERY FOR MEDICINE? HOLD THAT SCALPEL

By most accounts, Hillary Rodham Clinton's ambitious reformers are proposing the policy equivalent of a heart-lung-liver transplant for the nation's medical system. Although the Clintonites seem to be paring back their plans a bit, the approach is still likely to include price controls, hefty tax hikes, and a generous benefits package that could cost upwards of $100 billion a year. But liposuction and some deft arthroscopic work may be all the U. S. health-care system really needs.

There's little doubt the $900 billion medical industry must be fixed. In 1991, the U. S. shelled out 13.4% of its gross domestic product for health care—vs. 10% in Canada, the No. 2 medical spendthrift among industrialized nations. Yet America ranked 16th in life expectancy, says the Organization for Economic Cooperation & Development. And roughly 37 million Americans are uninsured.

But the system is slowly curing itself. Recent private initiatives are making coverage more affordable. For example, from Orlando to Seattle, health-care purchasing co-ops are giving small businesses the clout that large employers wield to negotiate discounts. And the spiral in medical inflation is leveling out. Some analysts dismiss it as the "Hillary effect": The threat of reform is forcing the industry to curb price hikes. But medical inflation has edged down since its 9.6% peak in 1990—long before Hillary Clinton became First Lady. Now, the level is about 6.6%.

MALPRACTICE SHIELD. Even that figure may be overblown. In Bureau of Labor Statistics price surveys, most doctors say they charge all patients the same fees. "We're not in a position to challenge the accuracy of that," says BLS economist Daniel H. Ginsburg. But 20% of patients are in preferred provider organizations (PPOs), says benefits consultant A. Foster Higgins & Co. PPOs can get discounts of up to 25%, but physicians generally don't report these bargain rates to the BLS.

The volume of services is also under attack. Numerous studies show fat in the system, and experts estimate that as much as 25% of our health tab pays for unneeded procedures.

The prescription: guidelines that tell doctors which procedures are right for certain symptoms. Various specialty groups are developing such guidelines, but their efforts are limited by a lack of information. The government should require physicians to disclose how their patients fare and to give precise fee data. The resulting guidelines could streamline services and help patients shop for the most cost-effective care. To foster compliance, MDs following the guidelines would be shielded from malpractice suits.

Another way to avoid costly services is to boost spending on prevention. Increased funding for low-income pregnant women, for example, would ensure good nutrition and prenatal care—and cut the huge bill for neonatal care.

The most nettlesome issue is access for the uninsured. But instead of replacing the current employer-based system with the monolithic purchasing bureaucracies the task force proposes, the government could require employers to provide a basic plan of hospitalization insurance. With such "catastrophic illness" coverage, workers would no longer worry about an operation plunging them into bankruptcy.

SIN SUBSIDY. Such an employer mandate would largely solve the coverage problem. According to the Employee Benefit Research Institute, 85% of the 37 million uninsured are workers and their families. The cost of covering them would be fairly modest. John C. Erb at Foster Higgins says a hospitalization policy with a $500 deductible would cost about $1,700—half what most companies spend for insurance.

The remaining 5.5 million uninsured should be eligible for a similar government plan, at a tab of under $10 billion. It could be financed by sin taxes or a payroll tax. And to assure uninterrupted coverage for job-changers and the sick, the government should force insurers to cover anyone who applies.

This incremental approach wouldn't produce higher-quality care at lower prices overnight. Neither would the Administration's grand design, which is likely to be phased in. But a more modest approach has a greater chance of success. It won't penalize those who have more generous insurance plans, as the Clintonites are considering. Nor will it stifle medical advances by freezing prices. Market incentives once encouraged spending, but now they are fostering a smarter allocation of resources. Those forces deserve a chance to work.

News Editor Crock oversees health coverage from Washington.

FIXING HEALTH CARE WITH MINOR REPAIRS

▶ Bar insurers from excluding applicants because of preexisting medical conditions. That would assure uninterrupted coverage for all.

▶ Require all employers to provide hospitalization insurance. That would take care of 85% of the 37 million uninsured who are employees or their dependents. The U.S. would provide benefits for the rest.

▶ Force doctors and hospitals to disclose fees and the results of their treatments. The data would let consumers shop for the best care at the lowest price and help root out unneeded procedures.

▶ Boost federal funding for low-income pregnant women. Proper nutrition and prenatal care could help cut the enormous tab for neonatal care.

DATA: EMPLOYEE BENEFIT RESEARCH INSTITUTE, BUSINESS WEEK

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Investing

THE RIGHT TIME FOR MARKET TIMERS?

It's Jan. 8, 1991. Secretary of State James Baker is meeting with Iraqi Deputy Prime Minister Tariq Aziz in an attempt to avoid a conflict over Kuwait. Everyone assumes they'll succeed. Market timers Charles and Gary Mizrahi are glued to their computer screens. On a graph, the red stock market line is rising to meet a thin yellow line that describes how many stocks reached new lows that day. But when Baker leaves the meeting with bad news, the red line takes a dive. The yellow still floats higher, one of several indicators telling the brothers to buy, buy, buy. "When Baker said the word 'regrettably,' we had to block our ears," says Charles Mizrahi. "Everybody's selling, we're buying, I'm not sleeping." Nine days later, the market vindicated him by rising 114 points—proving once again to the brothers that their market-timing system works.

That proof remains elusive for much of the financial mainstream. Some consider market timing akin to reading tea leaves or tarot cards. Stock guru Peter Lynch, who used to manage Fidelity Investment's Magellan Fund, has called it a waste of time, while financier Warren Buffett said it was only for the lazy, greedy, and foolish. The financial press disdains it, and, certainly, timers in the past have been their own worst enemies by vastly overstating their ability to deliver returns. But now, market timers are trying to recast their image. Backed by some recent studies and a growing number of clients, they're trumpeting their methods not so much as a way to get exceptional returns but to reduce market risk. With an overvalued market waiting to drop and a new cadre of risk-averse investors getting into equities, market timing might bear some reconsideration.

SWING SULTANS. Unlike investors who advocate buying stocks and holding on to them for decades, timers seek to anticipate and then capitalize on shorter-term market swings. To do that, they study familiar technical indicators such as the price-earnings ratio and trading volume, and use such exotica as artificial intelligence. When a particular set of indicators lines up a certain way or diverges just so, that signals the time to buy or sell. "We have 12 indicators," says Mizrahi of Hampton Investors in New York. "I think of them as wise men. When I ask if I should sell, and 10 of them raise their hands, I take their advice."

Timers' models vary: The vast majority use moving averages to spot downward or upward market trends as early as pc sible. Othe look for historic patterns to resurface price cycles to repeat. Se sonal timers even trade base on the time of week, mont or year. When signals poi to a market rise, timers bu into equity mutual funds; sell, they switch into mone market funds. Some also i vest in bonds, commoditie and global securities. Co trary to common belief, th are not always jumping and out of the market: Mo average only four "roun trips" a year.

SAFE FOOTING. How good a the timers? The fact is, th rarely outperform the Sta dard & Poor's 500-stock dex, and when they do, i by small amounts (table). B the best timers can safe

im to make S&P-like returns half the risk of someone no uses a buy-and-hold rategy. Since they are out of e market for an average of lf the time, they lower their sk, yet are still able to capre equity gains.

Thus, when risk is figured to their returns, timers constently outperform the mart. According to a study blished in the *Journal of rtfolio Management* last mmer, 92% of 25 timers acked by *MoniResearch ewsletter* outperformed mart averages in the 1987 colpse, as did 96% during ops in January, 1990, and igust, 1992. Another study ows that even if timers ssed all the market peaks tween 1946 and 1991, as ng as they also missed the lleys, they would beat the arket average. Mark Hulrt, author of *The Hulbert uide to Financial Newsletrs*, cites the example of wsletter *Market Logic*'s Seanality Timing System. It's ly in equities 30% of the ne yet equals S&P returns. hat's very impressive," says ilbert, "and attractive to meone who needs less risk."

OT FOR AMATEURS. This ight be something to nsider for investors no are taking on the ded risk of stock mutufunds only because cericate-of-deposit rates e so low. Or for retirs whose fixed incomes e shrinking, but who n't afford much volatil-. And market timers have their ears to the ound for the next corction—when the benes of reduced risk ll be that much more mediate.

No one would advise vice investors to try ning the market themlves. Dollar-cost avering—investing in stocks regular intervals—is ll the best way for inridual investors to exoit volatility because ey buy more shares ien prices are down d fewer when prices e up, says Robert Farrell, a veteran timer for Merrill Lynch. "The bulk of investors would do better to pick a cross-section of funds in the growth areas for this decade and dollar-average them." He likes technology, capital goods, telecommunications, and investments in emerging countries.

In addition, transaction fees and taxes levied whenever a timer cashes out can cut into your returns—possibly eliminating any advantage over the market average. These are costs that buy-and-holders don't pay, warns John Markese, president of the American Association of Individual Investors. "Most of the studies I've seen do not take these costs into account."

You might want to test the waters by subscribing to some timing newsletters. Hulbert publishes a thorough guide to newsletters both in his annually updated book and in a monthly newsletter (703 683-5905). He advises readers to look at the longest time frame when seeking top-ranked performers. Although past performance is no guarantee of future rewards, it is often the only way to judge.

CONTRARY TO BELIEF, TIMERS ARE NOT ALWAYS JUMPING IN AND OUT OF THE MARKET

Among his top five timers over the past 12 years are Douglas Fabian's *Telephone Switch Newsletter* in Huntington Beach, Calif., *Bob Nurock's Advisory* in Paoli, Pa., and *Professional Timing Service* in Missoula, Mont.

Another option is to invest in one of several mutual funds run by timers such as Paul Merriman or Comstock Partners' Dreyfus Capital Value. But proceed with caution: Timing funds have not had the greatest track records. "In 1991, the market was up 30%, and Comstock's fund made 4%," says Don Phillips, vice-president of Morningstar, a mutual-fund rating service. "In '92, the market was up 7% to 8%, and the fund lost 10%." But Comstock is doing quite well so far this year, up 10.74%. "They're wonderfully positioned now," says Phillips. "But how do you make up for those two years of losses?" During that time, over a third of their investors' funds were pulled out. Phillips advocates that market timers who invest their clients' private finances open mutual funds to test their performance in the public arena. Unfortunately, several previous attempts have failed. "Look at major market-timing funds such as Pilot, Lowry Market Timing, and Monitrend Mutual," he observes. "They've been unqualified disasters."

You might be better off investing through a professional timer who typically has limited power of attorney to switch your funds between equity and cash. To be on the safe side, pick one with an impressive record and watch his progress for awhile. "Look for people with a solid system and [the] discipline" to stick with their indicators, says Merrill's Farrell.

FIVE-YEAR WATCH. Stephen Shellans, who publishes *MoniResearch Newsletter* in Portland, Ore. (503 625-6716), has been auditing and ranking timers for 15 years. He ranks them by analyzing their customers' mutual-fund statements.

Ask if your prospective market timer belongs to the Society of Asset Allocators & Fund Timers (303 989-5656), which requires members to meet a variety of reporting and ethics standards. Shellans also suggests that investors stick with the program for at least five years—the length of an average stock market cycle.

It should be interesting to see how timers fare in the near future. After all, the inevitable bear market is waiting in the wings to test those timing talents. If they can protect clients from its full ravages, they may earn a greater following. In this business, after all, timing is everything. *Pam Black*

HOW MARKET TIMERS DO AGAINST THE MARKET

Timer	Minimum/ assets	Six-year total return after fees	Risk-adjusted return*	Average switches per year
DAVID PETERSEN/ FINANCIAL SERVICES ADVISORY 800 235-4567	No minimum/ (Minimum fee of $1,000) $75 million	12.9%	9.3%	5.2
JERRY WAGNER/ FLEXIBLE PLAN INVESTMENT 313 642-6640	$50,000 ($10,000 if qual. plan)/ $93 million	14.2	12.8	4.5
WALTER LOICK/ LBS CAPITAL MGMT. 800 477-1296	$25,000/ $245 million	14.3	12.3	6.3
ROBERT MEEDER JR./ R. MEEDER & ASSOCIATES 800 325-3539	$500 (IRAs) $2,500 (in fund)/ $550 million	14.2	11.3	9.8
DAVID RIGHTS/ RIGHTIME ECONOMETRICS 800 242-1421	$2,000/ $1.1 billion	14.9	13.2	3.3
S&P 500-INDEX	NA	14	8.5	0
MONEY-MARKET FUND	NA	6.6	6.6	0
EQUITY MUTUAL FUND	NA	8.2 (4.13 minus global and sector funds)	NA	0

*Measures investment performance relative to the risk associated with it NA=Not applicable

DATA: *MONIRESEARCH NEWSLETTER*, MORNINGSTAR INC

Investing

AVOIDING THE BROKER FROM HELL

The velvet-voiced stockbroker is promising to get you in on the ground floor of the next Microsoft. The tip is tempting, but you feel uneasy about entrusting your savings to a stranger—even one from a reputable brokerage. Is there any way you can check on a stockbroker's background, short of hiring a private detective? Indeed, there is.

One of Wall Street's best-kept secrets is the National Association of Securities Dealers' toll-free hotline, which tracks disciplinary and legal actions taken against brokers. On July 1, the two-year-old service expanded the information it provides.

By dialing 800 289-9999 on weekdays between 9 a.m. and 5 p.m. EST, investors can request records for any of 440,000 brokers registered with the NASD, the self-regulatory organization for the over-the-counter market. The NASD operators won't discuss a broker's file on the telephone—unless it shows a clean record—but will mail out a free report.

In the past, the NASD's central registration depository (CRD) provided data about final disciplinary decisions and criminal convictions. Now, the system includes:

- Any pending disciplinary proceedings brought by regulatory groups, which includes the NASD, Securities & Exchange Commission, the stock exchanges, and state governments.
- All criminal indictments, as well as final decisions in any civil lawsuits that involve a securities-related dispute.
- Arbitration decisions, which used to be available by calling a separate phone number. Now, the NASD's arbitration records extend to August, 1990. But come this September, you can get decisions dating from May, 1989.

These hotline changes should address some of the past criticisms of the CRD system, which was developed with state securities regulators in 1981. Critics have complained that the system didn't provide details about most of the pending cases and even some decisions i cases when the br ker appealed. What more, lawyers repr senting investor claim that the NASD records aren't com plete—meaning tha the group sometime issues a clean bill health to undeser ing brokers.

The NASD says will now disclose a final decisions bu will flag cases unde appeal. Still, som state regulators wis the NASD had chosen to di close pending civil lawsui and arbitration cases.

John Perkins, Missouri's s curities commissioner, recom mends that investors also g in touch with their state re ulator, who may disclose mo information than the NAS For the location and phon number of your state regul tor, call the the North Ame ican Securities Administrato Assn. at 202 737-0900. A fe calls now could make a b difference later. *Dean Fou*

Smart Money

MUTUAL-FUND FEES: GONE TODAY, HERE TOMORROW

In bold type, advertisements for Fidelity's new Spartan Intermediate Municipal Fund boast a tax-equivalent yield of 7.94% and a current yield of 5.48%. Only in the finest print at the bottom do you learn that Fidelity is currently reimbursing expenses, thus boosting the yields about 10%. But also in small type is the disclaimer: "Expense reimbursements may be revised at any time, at which time yield and return will decrease."

Nearly half of the mutual funds available today are temporarily waiving some or all of their expenses. The majority are bond and money market mutual funds, where yields have declined because of lower interest rates. In 1992, 63% of all money-market funds waived a portion of their fee, up from 44% in 1988, according to Lipper Analytical Services. Doing this enables a fund to distinguish itself from a pack of similar funds investing in the same, low-yielding securities. In addition, fee waivers give small, new funds a "tailwind" over competitors, says Don Phillips, vice-president at Morningstar, a mutual-fund rating service. "An extra 150 basis points [1.5%] can move you up an awful long way" in the rankings, he explains.

But be warned: Like banks that promise low introductory interest rates on adjustable-rate mortgages, fund companies absorb fees as a carrot to attract investors but offer no apologies when it is taken away. Once fees are reinstated, the yield inevitably goes down.

COY DISCLOSURE. Some fund groups tinker with fees, adding them back gradually as a fund grows in size. Other groups, such as Vanguard, disdain fee waivers, arguing that they don't give a true picture of performance. John Bogle, chairman of the low-fee Vanguard organization, says h gets "outraged" at some o the maneuvers. "It's not good idea to mislead peopl about yield."

Fidelity and Dreyfus wer the first fund advisers t waive the entire fee on som new funds in 1989. At tha time, they vigorously pro moted the cost savings in th headlines of their ads. Bu today, fund groups coyly de scribe the waivers only t the limited extent require by the Securities & Ex change Commission. That's t avoid attracting bargain hunters who will sell th fund when the fee is rein stated, Phillips says.

Investors need to keep a eye on fund fees. "Last year expense ratio may not te the story of this year or f ture years," says Geoff B broff, a senior vice-presiden at Lipper. If you pick a fun that's waiving fees, you benefit from the yield boos Just realize the gift is tem porary. *Amey Sto*

WAIVERS TO HIKE YIELDS

Fund	Fee waived	Current yield*	Yield if no waiver
DREYFUS SHORT-TERM INCOME FUND	1.01%	5.79%	4.78%
SPARTAN INTERMEDIATE MUNICIPAL FUND	0.55	5.48	4.93
STRONG SHORT-TERM BOND FUND	0.09	6.79	6.7

* Annualized

DATA: FUND COMPANIES

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Software

PATIENT, HEAL THYSELF —VIA PC

ou've been scratching your leg since returning from vacation, and you notice a rash. You d call a doctor, but instead turn on your personal nputer. Did the itching t shortly after an insect or after you ate seafood? you have welts, or are having difficulty swallow- ? Dr. Schueler's Home dical Advisor software el Perfect, $88, PC, Win- s) lets you field questions n a computerized physi- and suggests a diagno- You may have a severe rgic reaction; go see a doc- immediately.

Mindful of soaring medical s, ordinary folks are us- their PCs as MDs. The ket is flooded with a ge of health reference soft- e programs, some on CD- . Medicine Monitor (DINE tems, $79, Macintosh) s you keep track of the scription drugs you're tak- With Wellness Checkpoint HealthDesk (table), you log your family health ory and scrutinize your of living. Much Home Medical visor, FamilyCare ware's Personal sician lets you symptoms by a "doctor" and es with a real hoscope.

o be sure, none e programs can stitute for real ors, a point re- rced by dis- ners. But the soft- e can help patients o themselves be- they visit the or or undergo ensive diagnos- procedures. ctors are so y that we have do our own earch," says inia Jennings, who bought the Mayo Clinic Family Health Book CD-ROM when seeking information on hypoglycemia, a blood-sugar disorder afflicting her husband.

The Mayo Clinic disk blends nearly 1,400 clearly written pages of text from the original hardcover book, with animated graphics and voice-overs. You can move around the disk by entering search terms or clicking with a mouse on chapter headings. You can also jump from one section to a related topic elsewhere by clicking on highlighted words. For example, from "midlife crisis," you might skip to "cosmetic surgery" or "psychotherapy." Some of the pictures on the disk were generated by medical imaging equipment: A brain hematoma, for instance, was taken by magnetic resonance imaging. Among the animated clips are glimpses of an angiogram and a tooth abscess. One flaw: The program does not let you print things out.

BODY LANGUAGE. Although not as rich in detail as the Mayo Clinic disk, the Family Doctor CD-ROM holds 300 color illustrations, a medical glossary, and data on more than 1,600 drugs. At the core of the program are some 2,000 Q&A-style articles by Dr. Allan Bruckheim, a syndicated columnist. The pieces range from carpal tunnel syndrome to spider bites and can be printed out.

Home Medical Advisor is a friendly and complete program—for people who lack CD-ROM capabilities. Several data bases cover the medical landscape. A disease section summarizes symptoms and possible treatments for more than 500 illnesses. An injury file lets you garner information on ankle sprains, mountain sickness, and frostbite. If your child accidentally swallows Liquid Plumr, you can find out what to do in a section on poisons. More than 1,200 medicines are outlined in the drug file. As with the Mayo Clinic disk, you can jump between sections by clicking on color-coded words.

In Bodyworks: An Adventure in Anatomy (Software Marketing, $80, PC), the technical lingo abounds—but then, deciphering terms such as pectoralis major or Meissner's corpuscle are part of the program's appeal. Bodyworks lets you examine meticulous color drawings of the human body. You can peek inside the cardiovascular, muscular, reproductive, central nervous, and other systems. Choose the skeletal system, and you'll learn how bones and joints work together. The anatomical names are listed on the right side of the screen, and a mouse click brings up the corresponding (and precise) definitions at the bottom. Tiny pointers connect the names to their locations on the body diagram. So next time you have a headache, you will be able to find the cingulate sulcus or the paraterminal gyrus on your brain.

Edward Baig

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DATA: BUSINESS WEEK

Worth Noting

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■ **SINGAPORE FLING.** If you find the idea of Europe's Orient Express appealing, you will soon be able to travel from Singapore to Bangkok on a similar luxury train. On Sept. 19, the Eastern & Oriental Express leaves on its 42-hour, 1,200-mile maiden journey. A one-way ticket costs $1,130 to $2,950 per person. Call 800 524-2420.

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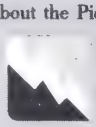

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American Red Cross

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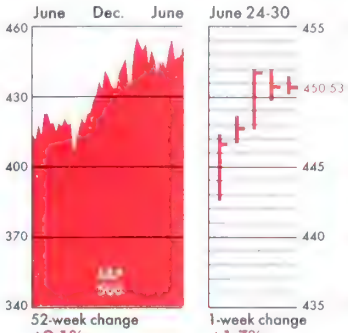
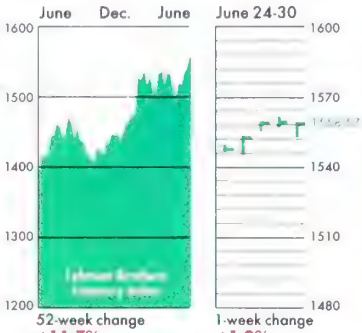
ks staged a spirited rally in re-
se to declining interest rates.
small and big-cap stocks
ved muscle, and even the slow-
oving Dow industrials rose a
50 points for the week. The
on 30-year Treasuries hit an
me low, and short rates also
led. That sent investors stam-
ng into finance stocks—espe-
y the banks, which only a few
ks ago were deemed by mar-
urus as past their prime. For-
stocks, however, hardly
ged.

STOCKS



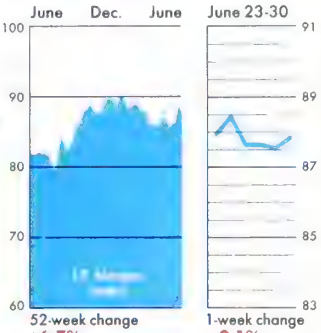
52-week change +9.1%
1-week change +1.7%

BONDS



52-week change +11.7%
1-week change +1.0%

THE DOLLAR



52-week change +6.7%
1-week change −0.1%

ARKET ANALYSIS

STOCKS	Latest	% change Week	% change 52-week
JONES INDUSTRIALS	3516.1	1.4	4.8
SIZE COMPANIES (S&P MidCap Index)	168.0	2.7	18.7
LL COMPANIES (Russell 2000)	233.4	2.5	23.1
COMPANIES (Russell 3000)	259.0	2.0	11.7

REIGN STOCKS	Latest	% change (local currency) Week	% change (local currency) 52-week
DON (FINANCIAL TIMES 100)	2900.0	0.0	16.3
YO (NIKKEI INDEX)	19,590.0	0.5	20.0
ONTO (TSE COMPOSITE)	3966.4	0.4	17.1

FUNDAMENTALS	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.09%	3.19%	3.63%
30-YEAR TREASURY BOND YIELD	6.67%	6.76%	7.75%
S&P 500 DIVIDEND YIELD	2.77%	2.80%	3.02%
S&P 500 PRICE/EARNINGS RATIO	22.7	22.3	25.5

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 26-week moving average	444.0	443.6	Positive
Stocks above 26-week moving average	55.4%	52.2%	Negative
Speculative sentiment: Put/call ratio	0.37	0.50	Neutral
Insider sentiment: Vickers sell/buy ratio	2.22	2.18	Neutral

IDUSTRY GROUPS

BRIDGE INFORMATION SYSTEMS INC.

R-WEEK LEADERS	% change 4-week	% change 52-week	Strongest stock in group	% change 4-week	% change 52-week	Price
OSPITAL MANAGEMENT	20.1	1.8	GALEN HEALTH CARE	28.1	52.1	18 1/4
NANCE	9.2	44.5	MBNA	14.8	54.6	28 1/8
OLD MINING	7.5	57.0	PLACER DOME	17.5	110.0	21
ATURAL GAS DISTRIBUTION	7.4	38.0	ENRON	19.7	63.0	68 1/4
OYS	6.9	23.3	MATTEL	9.3	10.5	26 3/8

R-WEEK LAGGARDS	% change 4-week	% change 52-week	Weakest stock in group	% change 4-week	% change 52-week	Price
HOES	−22.2	−1.0	GENESCO	−27.6	57.5	7 7/8
RLINES	−13.9	1.5	USAIR GROUP	−26.7	46.5	15 3/4
OMMUNICATIONS EQUIPMENT	−13.7	9.1	NORTHERN TELECOM	−23.5	−23.2	27 1/4
ACHINE TOOLS	−9.5	27.9	CINCINNATI MILACRON	−12.6	84.0	24 3/8
ECIALTY APPAREL RETAILERS	−9.2	5.1	CHARMING SHOPPES	−20.9	−1.3	13 3/4

UTUAL FUNDS

MORNINGSTAR INC.

DERS

week total return	%
ROGRESSIVE AGGRESSIVE GROWTH	8.9
ACKENZIE CANADA	8.3
UDDER LATIN AMERICA	7.2

eek total return	%
HG GROWTH	71.2
KINGTON STRATEGIC INVESTMENTS	71.1
ETLIFE-STATE STREET GLOBAL ENERGY	67.4

LAGGARDS

Four-week total return	%
FIDELITY SELECT AIR TRANSPORTATION	−9.6
SHERMAN DEAN	−8.1
GAM NORTH AMERICA	−6.2

52-week total return	%
PROGRESSIVE AGGRESSIVE GROWTH	−17.2
DFA CONTINENTAL SMALL COMPANY	−14.1
FINANCIAL STRATEGIC ENVIRONMENTAL	−13.2

ELATIVE PORTFOLIOS

DATA RESOURCES INC.

ar amounts
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sted one year ago
ich portfolio

ntages indicate
lay total returns

Foreign stocks	Treasury bonds	U.S. stocks	Gold	Money market fund
$12,398	$12,326	$11,365	$10,908	$10,236
+2.49%	+1.22%	+1.07%	+1.78%	+0.05%

a on this page are as of market close Wednesday, June 30, 1993, unless otherwise indicated. y groups include S&P 500 companies only; performance and share prices are as of market close June 29. Mutual fund returns are as of June 25. Relative portfolios are valued as of June 29. A more detailed explanation of this page is available on request

BUSINESS WEEK'S BUDGET PLAN

Odds are, when Senate Finance Committee Chairman Daniel Patrick Moynihan (D-N.Y.) and House Ways & Means Committee Chairman Dan Rostenkowski (D-Ill.) sit down to reconcile the two versions of the Clinton Administration's five-year deficit-reduction package, they will simply try to split the difference. The temptation will be to raise energy taxes a little on the Senate bill and cut Medicare spending a bit on the House side.

We have a better idea: the BUSINESS WEEK Reconciliation Bill, or BWRB. Instead of taking the easy way out, we propose a few hard choices that could lead to greater economic growth, more jobs, and—in case anyone in Washington still cares—less dependence on the volatile Middle East for our energy.

The BWRB accepts the Administration's original goal of cutting $500 billion out of the deficit over the next five years. We also reluctantly accept the one-to-one split between spending cuts and tax hikes, although we would have preferred much more in the way of cuts. But we recognize the realities of Democratic Party politics and note the Republicans, to their discredit, have refused to accept any taxes at all.

We believe there is still enough wiggle room to produce a better deficit-reduction package. The heart of the BWRB is a shift of the new tax burden away from production to consumption. To do that, we would bump up the Senate's gasoline and diesel-fuel tax from 4.3¢ to 15¢ a gallon, generating about $60 billion in new revenue. That would irritate Senator Max S. Baucus of Montana, where driving distances are longer than in, say, Miami. But the old canard that high gas taxes are unfair to Westerners should be laid to rest: A 15¢-a-gallon tax hike would cost each Montanan about $50 more a year than a New Yorker. With real gasoline prices lower today than in 1978, it isn't much of a sacrifice. It might even cut down on imports.

Besides, while the Western states are forever grumblin about the gas tax, no one complains much about the regio al disparity of the higher income taxes in the budget pac age. It takes a lot more income to live a middle-class life California and the Northeast than in the rest of the countr High state and local taxes have already pushed most of the folks into the 45%-to-50% bracket. Jacking the rates even hig er will hurt plenty. If Silicon Valley software writers and Bo ton accountants are going to help get rid of the debt of th 1980s, then ranchers in Montana can kick in, too.

With the extra dollars from fuel taxes, the BWRB wou restore most of the tax incentives for small business dump from the House bill. That's where the jobs, jobs, jobs are b ing created. The Senate's new capital-gains surcharge wou be jettisoned, helping both large and small companies. Th BWRB would retain the House's capital-gains tax cut of 50 for stockholders in new enterprises. That would help hig tech startups. The BWRB would then bring back the House capital-spending write-off and push it up to $100,000 p year, a sum big enough to be a real incentive for investmen

The BWRB would also include a new $5 billion tax cut f mom-and-pop stores, in lieu of the House's Empowerme Zones. These were supposed to be tax-free urban enterpri areas that would lure in big business. With corporatio downsizing, the concept is a faulty dream of big-city Dem cratic mayors. Helping existing neighborhood business gro is for real. Doubters should take the subway to Sheepshe Bay in Brooklyn or other New York neighborhoods underg ing a renaissance, thanks partly to corner-store businesse

Compared with the exciting possibilities that existed wh the budget process started, these are modest improvement But if made, they would show a commitment to investme and economic growth that the Democrats have been pro ising for years.

MEMO TO THE G-7: A LITTLE EASING, PLEASE

The Group of Seven's meeting in Tokyo on July 7-9 is shaping up to be a Renaissance Weekend for the world's political elite. Lots of important issues will be discussed, but not much in the way of action is expected.

Presiding will be the strongest leader of the industrialized club, who is, ironically, Bill Clinton—thanks to his successful missile attack on Iraq and the Senate's passage of a deficit-reduction plan. Most of the other national leaders will arrive unusually weak, their effectiveness corroded by the global spread of money politics. Governments in Italy and Japan are facing popular revolt against the corruption of their political systems by special interests. Britain's Conservative Party is being shaken by reports of secret Middle East funding. Germany, paralyzed by reunification and immigration, can't maneuver either. Central bankers have moved in to control economic policy. Obsessed as they are with fighting inflation, they have been running tight money policies, keeping inte est rates high, and curbing demand.

That was necessary to wring out the excesses of the 198 but now it is counterproductive. The end of the cold war h flooded the globe with an enormous supply of goods and bor, reducing the chances of inflation. New market economi plus the restructuring of old defense industries are unleas ing tremendous competitive pressures. In the G-7 economi prices on most goods are going down, not up. Wages are best stagnating, if not declining. Jobs are being lost, not gain

To boost growth, more demand is needed, not less. Ce tral banks, especially in Germany and Japan, must loosen m etary policy to boost consumer and business spending. Pr ident Clinton can help in Tokyo by leading a discussion the nature of the post-cold-war global economy. And, plea invite some central bankers.

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to **London**... where Ziraat provides a full range of banking services for business between the U.K. and Türkiye.

to **Brussels**... where Ziraat plays an active role in the integration of Türkiye with the European Community.

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to **New York**... where Ziraat speeds up banking transactions between the United States and Türkiye.

to **Tokyo**... where Ziraat acts as an advisor on business opportunities between Japan and Türkiye.

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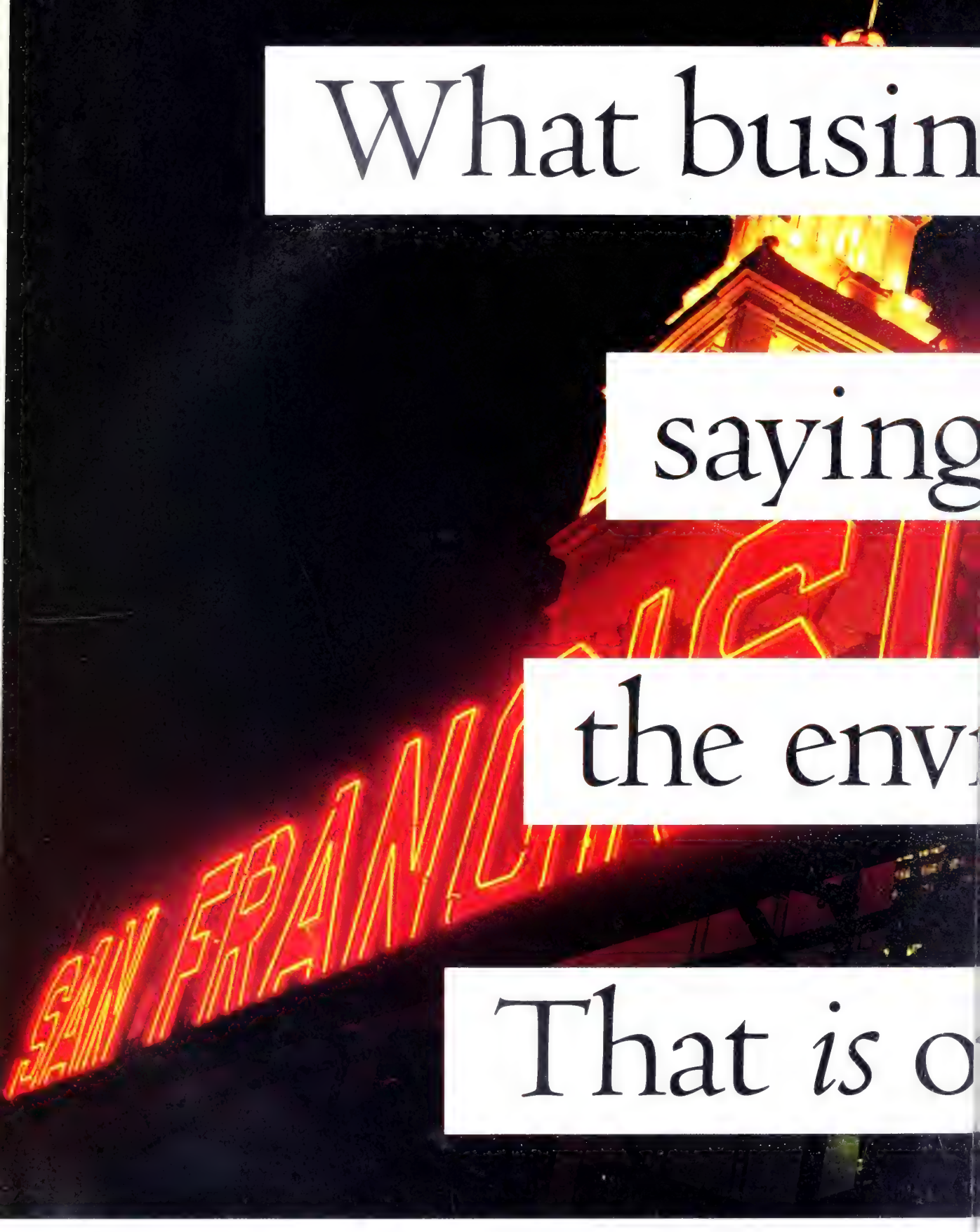
T.C. ZİRAAT BANKASI



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BusinessWeek

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HARVARD B-SCHOOL

IS IT OUTMODED?

PAGE 58

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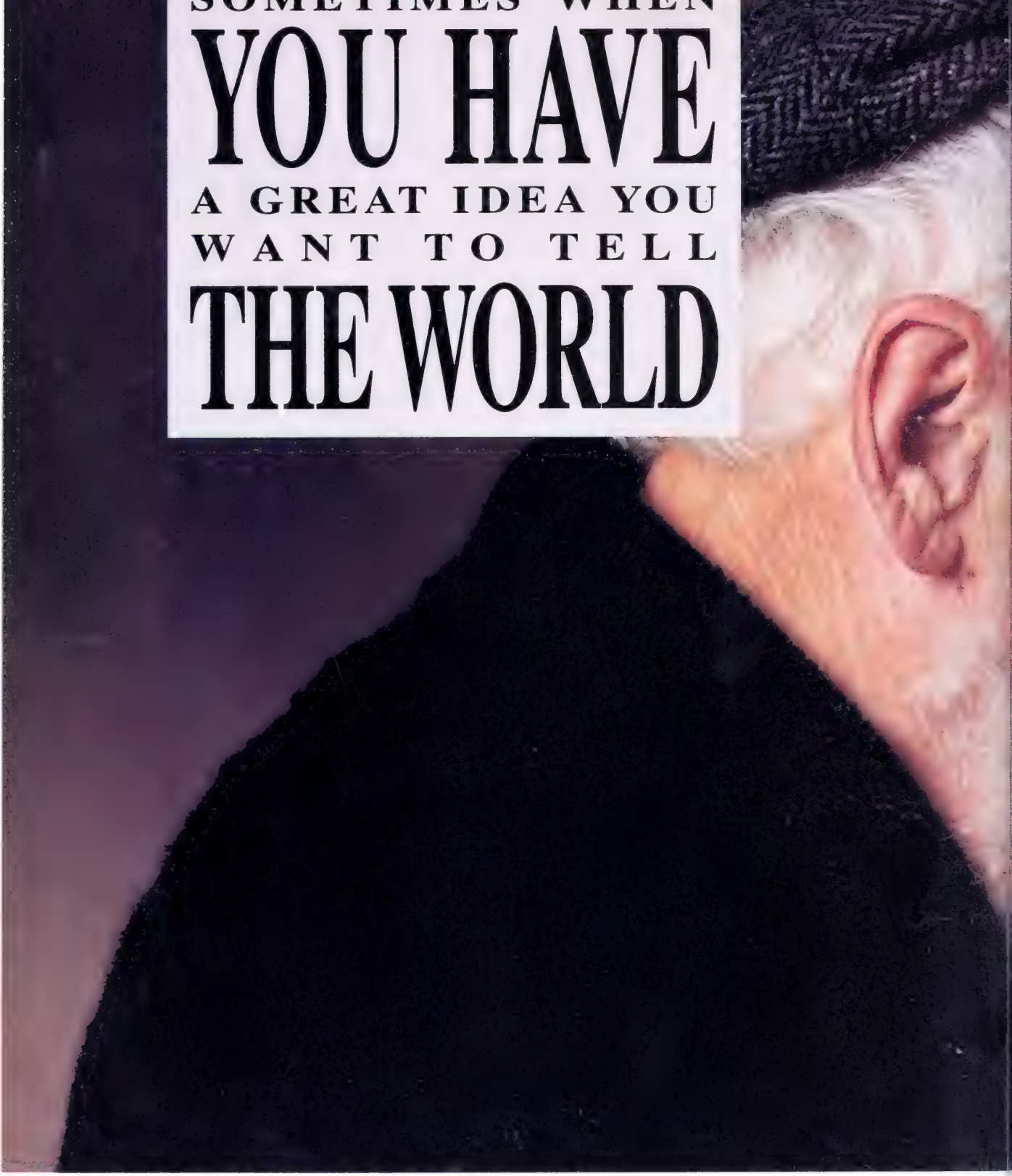

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BusinessWeek

JULY 19, 199

AMONG THE CHARGES HARVARD B-SCHOOL FACES: IT'S TOO AMERICAN, STRESSES CASE STUDIES TOO MUCH, AND DOESN'T FOSTER TEAMWORK

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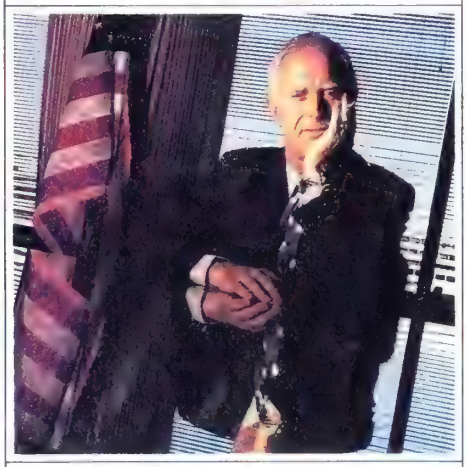

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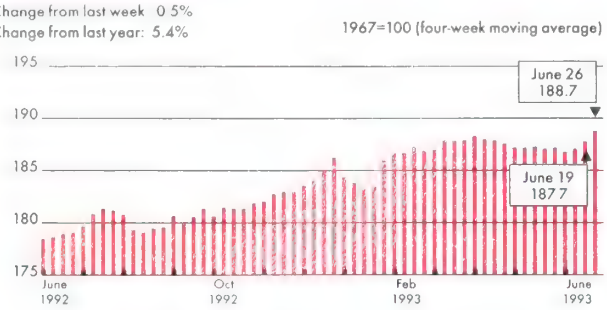
BusinessWeek Index

PRODUCTION

Change from last week 0.5%
Change from last year: 5.4%

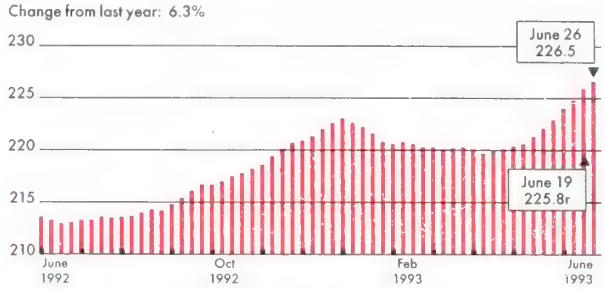


The production index rose modestly during the week ended June 26. On a seasonally adjusted basis, the output levels of autos, trucks, coal, lumber, and rail-freight traffic all posted healthy increases. Steel, crude-oil refining, paper, and paperboard production declined while electric power output was flat from the previous week. Before calculation of the four-week moving average, the index was up strongly, to 191.9 from 188.7.

BW production index copyright 1993 by McGraw-Hill Inc

LEADING

Change from last week: 0.3%
Change from last year: 6.3%



The leading index increased further during the week ended June 26. The continuing rally in the bond market helped to push yields lower, while the growth rate of materials prices increased and the number of business failures declined. On the negative side were lower stock prices and slumping growth in real estate loans and M2. Before calculation of the four-week moving average, the index fell to 226.3, from 227 in the previous week.

Leading index copyright 1993 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (7/3) thous. of net tons	1,869	1,823#	7.2
AUTOS (7/3) units	115,163	134,818r#	93.1
TRUCKS (7/3) units	88,811	101,414r#	120.6
ELECTRIC POWER (7/3) millions of kilowatt-hours	65,538	63,643#	7.9
CRUDE-OIL REFINING (7/3) thous. of bbl./day	14,308	14,149#	2.2
COAL (6/26) thous. of net tons	18,741#	18,955	39.2
PAPERBOARD (6/26) thous. of tons	817.4#	830.3r	−0.8
PAPER (6/26) thous. of tons	788.0#	806.0r	−0.1
LUMBER (6/26) millions of ft.	463.4#	458.4	−4.4
RAIL FREIGHT (6/26) billions of ton-miles	21.1#	21.5	33.5

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA[1], SFPA[2], Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (7/7)	107	106	126
GERMAN MARK (7/7)	1.70	1.69	1.51
BRITISH POUND (7/7)	1.50	1.51	1.91
FRENCH FRANC (7/7)	5.75	5.70	5.08
CANADIAN DOLLAR (7/7)	1.28	1.28	1.19
SWISS FRANC (7/7)	1.51	1.50	1.37
MEXICAN PESO (7/7)[3]	3.123	3.116	3.094

Sources: Major New York banks. Currencies expressed in units per U. S dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (7/7) $/troy oz.	395.800	378.450	13.9
STEEL SCRAP (7/6) #1 heavy, $/ton	115.00	111.50	29.9
FOODSTUFFS (7/6) index, 1967=100	209.0	202.3	3.1
COPPER (7/3) ¢/lb.	90.3	89.0	−22.2
ALUMINUM (7/3) ¢/lb.	57.5	55.3	0.0
WHEAT (7/3) #2 hard, $/bu.	3.03	3.16	−17.4
COTTON (7/3) strict low middling 1-1/16 in., ¢/lb.	52.72	54.78	−14.1

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, *Metals Week*, Kansas City market, Memphis market

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (7/2) S&P 500	445.56	445.91	8.[illegible]
CORPORATE BOND YIELD, Aaa (7/2)	7.24%	7.29%	−11.[illegible]
INDUSTRIAL MATERIALS PRICES (7/2)	95.8	95.8	−3.[illegible]
BUSINESS FAILURES (6/25)	330	361	−15.[illegible]
REAL ESTATE LOANS (6/23) billions	$398.4	$400.1r	−1.[illegible]
MONEY SUPPLY, M2 (6/21) billions	$3,481.8	$3,482.8r	1.[illegible]
INITIAL CLAIMS, UNEMPLOYMENT (6/19) thous.	351	345	−16.[illegible]

Sources: Standard & Poor's, Moody's, *Journal of Commerce* (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept CIBCR seasonally adjusted data on business failures and real estate loans

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
EMPLOYMENT, CIVILIAN (June) millions	119.2	119.3	1.[illegible]
UNEMPLOYMENT RATE, CIVILIAN (June)	7.0%	6.9%	−9.[illegible]
CONSTR. SPENDING (May) annual rate, billions	$453.5	$451.4r	3.[illegible]
CONSUMER SPENDING (May) billions	$4,288.7	$4,280.0r	5.[illegible]

Sources: BLS, Census Bureau, Commerce Dept.

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (6/21)	$1,075.6	$1,070.8r	13.[illegible]
BANKS' BUSINESS LOANS (6/23)	275.0	276.4r	−2.[illegible]
FREE RESERVES (6/23)	626r	704r	−36.[illegible]
NONFINANCIAL COMMERCIAL PAPER (6/23)	158.9	164.0	9.[illegible]

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed for two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	Year ago
FEDERAL FUNDS (7/6)	3.19%	3.00%	3.24[illegible]
PRIME (7/7)	6.00	6.00	6.00
COMMERCIAL PAPER 3-MONTH (7/6)	3.14	3.26	3.46
CERTIFICATES OF DEPOSIT 3-MONTH (7/7)	3.09	3.20	3.37
EURODOLLAR 3-MONTH (7/2)	3.19	3.21	3.54

Sources: Federal Reserve Board, First Boston

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

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Readers Report

DOES HELPING FAMILIES HELP BUSINESS?

Your cover story, "Work & Family" (June 28), was very well researched and written. Unfortunately, a lot of companies suffer from paradigm paralysis—they've become set in their ways, unable to see that the old ways of doing things are no longer good until it's too late.

A lot of companies complained bitterly about the cost of the family leave bill signed by President Clinton. But if they took a more active role in dealing with issues that affect society today, maybe we wouldn't need government mandates.

In the era of global competition, the people we have leading our companies need to wake up and realize what's going on around them.

Mike McKeown
Blackwood, N. J.

I read with great interest your story on work and family issues. Not only are our working parents caring for children, they are the "sandwich generation" caring for aging parents. An estimated 20% to 25% of employees at a typical U. S. company spend 6 to 35 hours a week on responsibilities to the elderly—equivalent for some to a second full-time job.

Working parents spend 17 years raising a child and many now have 18 years of responsibility for one or both parents. There is evidence that many employees consider leaving traditional employers for others that are more flexible and open to these issues. To be competitive in 2000, organizations need to consider innovative approaches to solving not just child-care issues but the entire work/family conflict.

Gloria A. Scherma
Eldercare Programs Director
Harris, Rothenberg International
New York

My favorite BUSINESS WEEK caption ever: "We had to recognize that people had lives." Great story. But as one who has toiled in a workplace where I have no authority whatsoever, I wish you had found an example in a midsize accounting, health-care, or legal setting. Change is a damn tough wall to scale.

Frankie Pelzman
Washington

You neglected to mention the extended benefit to society when businesses recognize the relationship between work and family values: the development of positive role models. One example: your profile of boss Sam Rivera. When his employees become managers or parents themselves, where will they look when deciding how to tackle the job? Back to Rivera. The example he sets extends far beyond his own shop.

Sheri C. Anderson
Portland, Ore.

LONG BONDS: RATE HIKES REALLY HURT

Absent from your article "As long bonds get longer, do they get riskier?" (Finance, June 28) is any allusion to interest-rate risk. A 1% increase in long yields in the next year, not an implausible scenario, will cause an 11.2% drop in the price of a 50-year issue vs. a 10.6% decline on a 30-year issue. On a $1 million investment, the additional $6,000 loss on the 50-year issue is quite real. The small, 0.25% yield advantage for the 50-year vs. 30-year issue is largely attributable to this phenomenon.

Charles Corcoran
Crested Butte, Colo.

EXECUTIVE LIFE: CALIFORNIA'S INSURANCE CHIEF BEGS TO DIFFER

When you resurrected tired and unfounded criticisms of my handling of the rehabilitation of Executive Life Insurance Co., I was disappointed to see you misled by those who are trying to sabotage our efforts ("In California, a botched bailout?" Finance, June 28). It's a shame you chose to report their groundless charges in place of what real-

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Readers Report

CORRECTIONS & CLARIFICATIONS

A table with "A topsy-turvy year for giants" (The Global 1000, July 12) misidentified a company. In the "country by country" list, the name of No. 87 in the U. S. should be Federal Home Loan Mortgage Corp.

ly happened. Here's what Superio Court Judge Kurt J. Lewin, who ha presided over the case for over tw years, said in court about your story:

"These accusations . . . have never bee substantiated, and they don't obtain an greater dignity because they appear i [BUSINESS WEEK]."

Executive Life was California's wors insurance insolvency. But thanks to ou efforts, more than 90% of the compa ny's policyholders will receive 100% o their money. That's an accomplishmen of which I'm enormously proud.

John Garamend
Insurance Commissione
Sacrament

Editor's note: Judge Lewin approved th original plan for Executive Life, whic was overturned by an appeals court i March. Under the current plan, polic holders and investors in Executive Li products will lose about $1 billion.

THE FED WON'T BE FOLLOWING FISCAL POLICY OVER THE CLIFF

Rudi Dornbusch attempts to propa gate the continuing myth that Fe Chairman Alan Greenspan is prepared t ease at the first sign of a budget de ("Inflation: Don't push the panic bu ton," Economic Viewpoint, June 21). A ter the negative real interest rates the 1970s, however, the bond mark won't be fooled again. Long-term rat will rise instantly at the slightest hint "easy money," which the market inhe ently understands is inflationary, re dering counterproductive any stimul on the short end of the market. Gree span attempted to explain as much February congressional hearings but w widely ignored by the press and sen tors in attendance. As fiscal policy hea toward the cliffs, we can take some co fort knowing that Greenspan's Fed inching toward a commodity price sta dard and will maintain its commitme to price stability.

Jude T. Wannis
Morristown, N.

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CRAIG R. HICKMAN
AUTHOR OF MIND OF A MANAGER, SOUL OF A LEADER

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FOR GOD, COUNTRY AND COCA-COLA: THE UNAUTHORIZED HISTORY OF THE GREAT AMERICAN SOFT DRINK AND THE COMPANY THAT MAKES IT
By Mark Pendergrast
Scribners • 556pp • $27.50

FROM SOUPED-UP SYRUP TO BOTTLED GOLD

At last year's Winter Olympics in France, it was virtually impossible to miss the world's best-selling soft drink. Visitors expecting pristine Savoie vistas on the train ride between Bourg St. Maurice and Albertville instead saw dozens of Coke billboards and three-story-tall hot-air balloons in the shape of Coke cans. Not surprisingly, vacationers began derisively calling the games the Coke Olympics.

That sort of relentless marketing assault goes a long way toward explaining the continuing success of Atlanta-based Coca-Cola Co. Just in the past decade, under Chairman Roberto C. Goizueta, the value of Coke stock has surged more than eightfold, to $55 billion, as total sales have tripled, to $13.1 billion.

Given the pressures inherent in maintaining such success, it's no surprise that Goizueta and most of his crew take themselves very seriously. But at Coke, that's nothing new. As Atlanta native Mark Pendergrast tells us in *For God, Country and Coca-Cola*, an obsession with growth has been a company hallmark for most of the past century.

Pendergrast's account is a good deal more intriguing than the sanitized corporate history Coke peddles at its $15 million World of Coca-Cola museum in Atlanta. Pendergrast delivers the tale warts and all, starting with the travails of small-town Georgia pharmacist John S. Pemberton, who in 1886 first concocted Coke syrup in his laboratory.

Pendergrast describes Pemberton as a morphine addict who was trying to create a marketable patent medicine when his experiments led him to the now-sacred Coke formula. His syrup contained extracts from the South American coca leaf and the African kola nut, a source of caffeine. An assistant, Frank Robinson, came up with the alliterative name and created the distinctive flowing script for the logo that's still used today.

Not much of a businessman, Pemberton had only modest success selling Coca-Cola in Atlanta. Worse, he sold the formula and the rights for a pittance to multiple buyers before he died in 1888. Atlanta druggist Asa Candler, who soon gained control of Coca-Cola, is in many ways the true father of Coke, says Pendergrast. It was his savvy that transformed the small-time operation into a nationwide soda-fountain sensation.

One Coke legend is that in 1899 Candler made a colossal blunder, giving away bottling rights to two businessmen from Chattanooga. Soda fountains were the primary market then, and Candler saw the nascent bottling business as a likely money-loser. A bad call, but in this case it was better to be lucky than smart: Pendergrast points out that Coke would never have grown as fast as it did without the capital invested by bottlers around the country—and eventually around the world.

Pendergrast's history of Coke reveals an obsession with growth that has lasted most of the past century

The wisdom of relinquishing bottling rights is but one of the controversies surrounding the Candler era. Another is the question of whether his Coke contained cocaine. Corporate Coke has long disputed this piece of American folklore, saying the coca leaf was decocainized. Early Coke had a "distinct cocaine kick," maintains Pendergrast, who quotes Candler testifying in court that Coke contained "a very small proportion" of the drug. Moreover, the author makes a convincing case that without cocaine, Coke would not have become so popular earl on. Cocaine wasn't entirely eliminate until 1902 or 1903, he says, and the only as a panicked reaction to a rise i racism inflamed by newspaper allega tions that hopped-up black Coke drinker were attacking whites.

In 1917, Candler gave almost all c his Coke stock to his children, who sol out barely two years later to a syndicat headed by Atlanta banker Ernest Wood ruff for $25 million. Woodruff's son, Rob ert Winship Woodruff eventually too over and ruled Coke with an iron han virtually until his death in 1985.

Pendergrast, a former librarian, fill his account of the Pemberton and Car dler eras with well-fashioned anecdote and previously unreported detail. Bu once Candler leaves the picture, the na rative and analysis go flat. Plowin through the retelling of the Woodru years takes some stamina, and Pende grast breaks no new ground in recoun ing the disastrous intro duction of New Coke. A the same time, he unde plays one of the pivot business events in Coke history—the U. S. gover ment's decision to buil at taxpayers' expense, network of bottling plant around the world so tha GIs in World War could have easy access t the pause that refreshe

After the war, thes military-issue plants r verted to Coke, whic used them to establis global dominance in th soda business. Today, d spite all the attentio paid to the "cola wars" b tween Pepsi and Coke in the U. S., mo of the real action at Coke is oversea Less than 20% of Coke's 1992 operatin income came from U. S. soft-drink sale

Pendergrast ends with what he d scribes as a treasure unearthed in th Coca-Cola archives: a copy of what h says is Pemberton's original formula f Coke syrup. Coke, which since Candler day has rigorously guarded past ar present formulas, insists that Pende grast didn't find the Real Thing. B even if he did, the soft-drink gia doesn't have to worry much about imit tors. Not unless they can also copy th marketing firepower of a company th plans to invest $1.4 billion in the new opened Eastern European markets b fore the 1996 Summer Olympics ope in—wouldn't you know it?—Atlanta.

BY CHUCK HAWKIN

Hawkins manages the BUSINESS WEE bureau in Coke's hometown.

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Co-Founder, Crate & Barrel

> **"WHEN WE GOT MARRIED, EVERYTHING WE LOVED WAS TOO EXPENSIVE, AND EVERYTHING WE COULD AFFORD WAS TOO UGLY."**

JAPAN'S CLOSED MARKETS: HOW TO OPEN THEM NOW

BY RUDI DORNBUSCH

Thirty years ago, Japan imported 2.5% of its manufactured goods. Today, it's 3%—less than half of what the U.S. and European nations buy from abroad. Trade targets, backed by sanctions, are the answer

RUDI DORNBUSCH IS PROFESSOR OF ECONOMICS AT MASSACHUSETTS INSTITUTE OF TECHNOLOGY

The Clinton Administration was right to adopt a results-oriented approach in trade relations with Japan, even though talks faltered before the summit. After almost 1,000 rounds of negotiations that have led nowhere, the only credible strategy left is to insist on quantitative targets for market-access gain. Of course, the strategy is credible only if it is clear that failure implies U. S. sanctions.

We have not heard much about what those sanctions might be, and that is all to the good—such matters are more effective when left to the imagination. A results-oriented trade strategy might take the form of detailed lists of what progress is sought in each and every industry. Alternatively, broad and uncluttered targets could be set for total import penetration. The latter is clearly the best strategy, hence the one we should favor to avoid getting bogged down in lobbying at home and fighting through impenetrable trade jungles in Japan.

Many think Washington should continue to tread lightly. Some say that since negotiations have not succeeded for years, to persist can only sour relations further. But Japan's closure is the greatest threat to acceptance of an open trading system both in Europe and in the U. S. If Japan successfully holds out, protectionists have an unarguable case that world trade today is not a level playing field.

Others contend that the U. S. cannot afford to antagonize the Japanese: They are the lenders, they are the suppliers of key components, even to the U. S. military. If the U. S. acts up, they turn off the juice. But that argument surely cuts the other way: If Japan stops lending, the yen would go through the roof, and the country will lose out in world markets for its exports. It's far from impossible that we could see an 80-yen dollar. As to dependence on Japan for U. S. security, if America's armed forces rely so heavily on Japanese suppliers, it may be better to pull the plug now than to risk serious dependence in some later crisis.

PERFECT TIMING. One might also argue that this is a poor time, in the midst of Japanese political turmoil, to ask for access. But the things the U. S. wants from Japan—that it become a modern, open economy—are very much a part of what is involved in the current collapse of Japan's arcane political and social system. The new leadership won't run to inaugurate massive, instantaneous openness. But its agenda of an open society and economy runs parallel to America's. At least they will understand what the U. S. is talking about.

In the trade area, the Clinton Administration has made a good choice: pursuit of the General Agreement on Tariffs & Trade, th North American Free Trade Agreement, an free-trade options wherever they can be foun In time, that strategy will deliver good jobs a good wages. Getting into the Japanese marke is an important part of the new strategy. Th economic center of the world has been shiftin to Asia at the same time that the U. S. foo hold there has been slipping. Asia's econ mies have been prospering, and with the co war over, their dependence on America ha shrunk to insignificance. Without radic change in the next few years, the U. S. will b left out in the development of the most d namic part of the world.

Opening Japan is important because of th sheer size of its market. As Willie Sutton e plained when asked why he robbed bank "because that's where the money is." Japan a J. P. Morgan & Co. of a market, with affl ent consumers prepared to spend lavishly c goods that they are eager to buy. The U. S has the goods—and needs the jobs. Openi Japan is also important on a less obvious le el: Teams that face strong teams perform f better than those who compete against wea opponents. Competing inside the Japane market, where cutting-edge technology a super quality are the rule, will encoura U. S. companies to perform better and lim the sheltering of Japanese companies.

BACK-SCRATCHING. Japan's response alwa comes down to this: The country is open, b U. S. marketers are unwilling to face up the slogwork necessary to entice demandi Japanese consumers. There is a germ of tru in this, but it's clear that most of the proble lies in the structure of the Japanese politic and economic system. The intricate arrang ment of back-scratching between business a government and within business groups, pl the ostracizing of anything foreign, ha formed an impenetrable shield. There is a c ebrated Japanese maxim—the nail that stic up will be beaten down. Few Japanese com nies raise their heads.

In such a system, formal openness, as me ured by tariffs or the absence of quot means little: Resistance lies in the weight the bureaucratic process and the drag of gro opposition to imports. Japan is unique amo industrial countries for its low import penet tion—3% in manufactured goods, up o slightly from 2.5% some 30 years ago. Th compares with 8% in the U. S. and far mo for any European country. Nonoil imports i Japan as a share of their GDP are less tod than they were three decades ago, falling fr 15% to 7%. Of course Japan is different: T difference is that it doesn't import.

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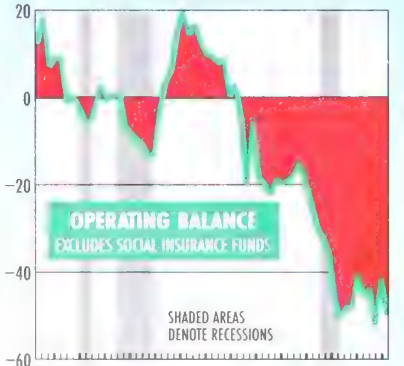
BY GENE KORETZ

THERE'S THE BIG DEFICIT—AND ALL THE LITTLE ONES

While Congress and the Administration grapple with the 10-ton gorilla known as the federal deficit, state and local governments are engaged in similar struggles. According to the Commerce Dept., the combined balance of all state and local operating budgets, including capital outlays, registered a shortfall of $45.5 billion at an annual rate in the first quarter—the second-largest outpouring of red ink since the recovery began (chart).

State and local officials, almost all of whom face balanced-budget requirements for their general funds (outlays excluding capital spending), are struggling to cope. "We're between a rock and a hard place—lagging revenue growth and mandated spending increases," says Brian Roherty, executive director of the National Association of State Budget Officers. A recent survey of 688 cities by the National League of Cities indicates that 53% expect expenditures to exceed revenues this year.

STATE AND LOCAL BUDGETS ARE STILL BLEEDING



▲ BILLIONS OF DOLLARS, SEASONALLY ADJUSTED ANNUAL RATE
DATA COMMERCE DEPT

Such a situation is unprecedented in the postwar period. In past business cycles, the need for recession-inspired belt-tightening evaporated as economic recovery sparked rapid revenue growth. And real state and local spending on goods and services continued to rise through recessions and recoveries, bolstering the economy.

This time around, however, state and local budgets were already under pressure in the late 1980s. And after enacting a then-record $10.3 billion tax hike in fiscal 1991—just as the federal government boosted taxes—the states raised taxes by an additional $15 billion in 1992. But rather than restoring fiscal health, such increases stirred taxpayer wrath as the recovery failed to provide more than modest revenue growth.

A Federal Reserve study indicates that states and cities would still be running an operating budget deficit of about $25 billion even if the economy were growing at its full-employment potential. Federally mandated spending for Medicaid, criminal justice, and the environment all contribute to this structural deficit, says economist Martin Barnes of *The Bank Credit Analyst*.

All of this leaves states and cities with few options. Taxpayer resistance forced the states to slow tax hikes to only $3 billion in fiscal 1993 and $3.7 billion in 1994, but more seems likely. Meanwhile, states and cities are busy privatizing operations and cutting payrolls, services, and capital outlays. In many cities, per capita spending is declining in real terms.

In short, federal fiscal restraint is being matched by budgetary restraint at the state and local level. The days in which rising spending in the hinterlands buoyed the economy through thick and thin seem over.

WHY THE ECONOMY IS SOPPING UP SO MANY GREENBACKS

Where has all the money gone? In the past year, the value of greenbacks in circulation has surged by about 10%, or $28 billion. Ordinarily such a rise in this component of the money supply might signal a coming economic pick-up, but many observers think the added cash is actually flowing overseas to such places as the former Soviet Union and Latin America, where the dollar functions as an alternative currency.

Economist Paul J. Isaac of Mabon Securities Corp. isn't so sure. He points out that dollars have leaked into communist countries for years, so a floating supply existed before the Soviet political breakdown. Moreover, Russians now find it much easier to hold foreign-currency balances abroad, and plummeting economic activity and exports in the former Soviet Union limit the country's ability to absorb dollars. Similarly, Isaac notes that stabilization policies and financial liberalization in Latin America have reversed capital flight and spurred investment. Indeed, lower inflation and the availability of credit instruments offering real returns may have reduced local Latin demand for dollars.

The main source of rising demand fo dollars, argues Isaac, lies at home. A banks have eliminated free checking, im posed service charges on low-balanc accounts, and closed "low profit" branch es, low-income individuals have come t depend increasingly on cash. As of 199 he notes, only 63% of adult American had bank accounts. And yellow-page list ings of check-cashing outlets rose fror 1,538 in 1987 to 4,125 by mid-1992.

If Isaac is right, much of the adde supply of cash is being used in the U. S "On balance," he says, "this implies tha monetary growth has been stronge than many people believe."

DON'T BET THE BANK ON GOLD PRICES AS AN INFLATION INDICATOR

After running up in May, gold price leapt to a two-year high in earl July, raising new inflation concerns. T test the validity of such concern economist L. Douglas Lee of NatWes Washington Analysis looked at th record over two decades, since the dolla was decoupled from gold convertibility

Lee found that gold prices tend t reflect overall inflationary trends, bu they are far more erratic than change in the consumer price index. Moreove using three-month moving averages, h found no statistically significant relatio ship between gold prices and subsequer inflation, with time lags up to 12 month

The best explanation for current soa ing gold prices, concludes Lee, is hig demand from places where inflation is problem, such as China, and sudde surges in commodity prices—like th current runup in soybean futures. Bu "the usefulness of gold in predicting i flation," he says, "is virtually nil."

BENEATH THE SURFACE, THE JOB MARKET MAY BE STIRRING

Although the June employment r port showed a dismal 13,000 i crease in payroll jobs, there is good re son to take it with a grain of salt. F one thing, the employment survey f June was done unusually early, so missed much of the normal surge summer jobs for students. For anothe the June tally has been revised upwa for five straight years by an average 90,000. Finally, it's worth noting th the Conference Board's help-wante advertising index in May posted its hig est reading in three years.

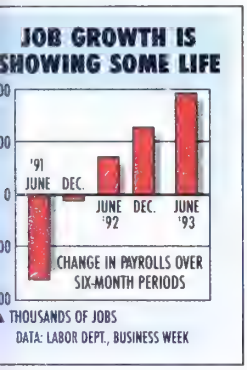
LY 19, 1993

BY JAMES C. COOPER AND KATHLEEN MADIGAN

THE OLD JOBS MACHINE STILL SHOWS SOME MOMENTUM

Although the recession officially ended 27 months ago, the economy is still trying to decide if it is recovering or faltering. But while the first half as disappointing, don't write off the second half just et. One lesson of this start-and-stutter expansion is that e past has never been prologue.

After growing at a healthy 4.1% annual rate in the cond half of 1992, the economy's pace slumped to 0.7% in e first quarter, and growth probably struggled to reach % in the second quarter. But if anything, the fundaental supports for growth strengthened in the first half.



It didn't look that way in June, especially in the labor markets. U. S. industries added a scant 13,000 workers to their payrolls last month, and the jobless rate edged up to 7%, from 6.9% in May. Only 45% of the 356 industries surveyed by the Labor Dept. boosted their June work rosters, meaning that more companies cut payrolls than expanded them.

But even despite stagnant June payrolls, keep in mind at the economy generated nearly 1 million jobs in the st half of the year (chart). That's an average of 160,000 bs per month, the best six-month showing in three ars. That performance is still below the typical expanon pace, but it shows that income growth is improving, are prospects for consumer spending.

Moreover, long-term interest rates fell by nearly a perntage point in the first half. Mortgage rates are at a 21-ar low, and home buying and building will add handmely to second-half growth. Also, the low cost of capital, ong with continued growth in corporate earnings, sugsts that business spending on equipment will remain a iving force in this expansion. Consumer, housing, and uipment outlays are 80% of the economy.

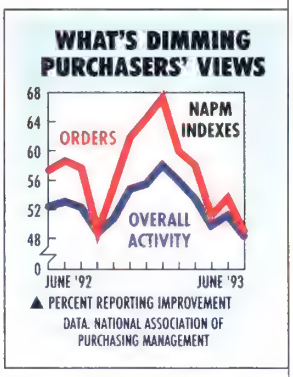
FACTORY WOES ARE FAR FROM OVER

However, even if the second half is a start, yet another stutter could lie on the horizon in 1994. That's because, like no other expansion before it, this one faces extraordinary set of drags, mostly on goods producers. First, debt burdens are still limiting consumer spending, d they will continue to do so for years, not just months. nd by next year, shrinking the federal deficit also will ld back the economy. That's in addition to the drain om the post-cold-war defense builddown.

Internationally, Germany's worst recession in three decades—the result of its struggle to control the inflationary potential of a costly reunification—has enveloped nearly all of Europe, and that has hurt U. S. exports. At the same time, a wave of highly competitive goods from Asia and Latin America represent a new challenge for U. S. companies in markets both here and abroad.

No area of the economy is getting hammered as hard as U. S. manufacturing. And factory workers are bearing the brunt of the blows. After appearing to touch bottom in the winter, payrolls have started to fall once again. Manufacturing has lost 187,000 jobs since February, including 53,000 dropped in June alone. Factory employment has been in a steady decline since 1989, and payrolls have shrunk to their lowest level since 1965.

Now, the factory workweek has begun to decline. Hours worked fell for the second month in a row in June, slipping six minutes, to 41.3 hours. The shorter workweek, combined with the layoffs, suggests that industrial production was flat or down slightly in June.



The falloff in military orders has packed an especially big punch. Since 1990, 300,000 workers have been let go in defense-related industries—accounting for about 20% of all pink slips in the factory sector. And these layoffs will continue for years to come as Washington pares the Pentagon's budget further.

EUROPE'S ILLS BRING PAIN TO EXPORTERS

The cutbacks in the defense industry would not hurt as much if factory demand from other customers was flourishing. But that just isn't the case. The National Association of Purchasing Management reported its index of industrial activity fell to 48.3% last month, from 51.1% in May, in large part because of a drop in orders (chart). The NAPM index of new orders slid to 49% in June—the lowest reading in 10 months.

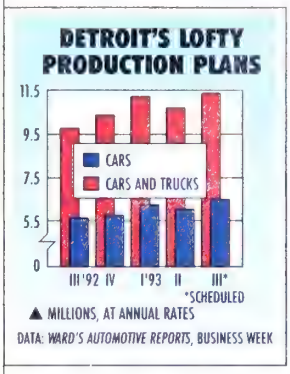
Part of the problem is the weakness in foreign demand. New export orders did rise in June, but at a much slower rate than in April or May. Economic slumps of some of the major U. S. trading partners are hurting the growth of American exports.

The recent cuts in European interest rates—led by an easing of monetary policy by the Bundesbank—will help to pave the way for an economic turnaround in Europe. But

ERIC HOFFMANN BW

that probably won't happen until 1994, so U. S. exporters will have to struggle until then.

For now, domestic demand is no great shakes either. Consumers are increasing their spending at a moderate pace. Retail inventories that built up in the first quarter are being drawn down, but stores are cautious about ordering new merchandise, so manufacturers have little reason to expand their payrolls or output.



Despite these drags, the manufacturing outlook for the second half is a bit brighter. One warm spot is the auto industry. Detroit has boosted its production schedule for the summer. Third-quarter output of autos, light trucks, and heavy rigs could reach the highest level for that period since 1985 (chart).

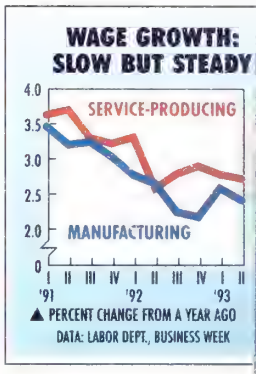
If these ambitious plans are carried out, vehicle production could add as much as a full percentage point to real gross domestic product growth during the summer months. And the increased output from auto suppliers—from steel to glass to rubber producers—will increase economic activity as well.

The recent strength in auto and truck sales is why domestic auto makers are revving up their assembly lines. U. S.-made cars and light trucks sold at an annual rate of 12.8 million in late June, bringing the total for the month to a 12.2-million pace, a bit higher than the strong 12 million sales rate in May.

JUNE DATA MAY HAVE MISSED SOME JOBS

Despite the manufacturing jobs lost in the first half of 1993, service-producing industries and construction added 1.1 million, helping to lift consumers' incomes and spending. In the second half, service payrolls will likely continue to grow by about 180,000 per month, and construction employment may even speed up, given th improving housing outlook.

Moreover, the slowdown in wage growth appears t have bottomed out for both manufacturing and service (chart). Average hourly earnings dipped 1¢ in June, t $10.80. Annual growth in hourly pay has been stuck in th range of 2.3% to 2.5% for the past year. Now that wag growth is no longer slowing, the drop in pay growth tha began in 1989 will no longer offset any of the positive in pact of job gains on income growth.



With most of the economy's troubles hitting the manufacturing sector, there is every reason to believe that the economy can continue to generate jobs in the second half at an average monthly pace equal to, or a bit better than, the 160,000-per-month gains of the first half. First of all, the disappointing performance of June payrolls should not be too surprising, given that jobs in both April and May had posted large, unsustainable i creases of 255,000 and 215,000, respectively.

In addition, the poor June reading may have understa ed employment conditions in the month. The governme took its survey earlier than usual. As a result, the nur bers may not have captured the full impact of students e tering the summer-job market, which might not show u until the July data. The June gain in service emplo ment, where students are most likely to find jobs, was f below its recent trend.

All in all, 1 million new jobs generated over two qua ters is not consistent with economic growth as insip as the 1% to 2% pace of first-half gross domestic produc If job growth is as healthy as the recent trend suggest though, then the stutter in first-half GDP is very likely turn into a second-half start.

THE WEEK AHEAD

PRODUCER PRICE INDEX

Tuesday, July 13, 8:30 a.m.
The median forecast of economists surveyed by McGraw-Hill Inc.'s MMS International expects that producer prices of finished goods declined by 0.2% in June. If so, that would be the first drop in producer prices in seven months. Prices were flat in May but had galloped at a 4.7% annual rate in the first four months of the year.

CONSUMER PRICE INDEX

Wednesday, July 14, 8:30 a.m.
Consumer prices probably increased by 0.2% in June, following a 0.1% rise in May. Core inflation, which excludes food and energy costs, likely rose 0.2% in June, the same small advance as in May. After a surge in early 1993, inflation is settling back down.

RETAIL SALES

Wednesday, July 14, 8:30 a.m.
Retail sales probably rose a modest 0.3% in June, after a small 0.1% gain in May, says the MMS report. Excluding cars, retail sales likely rose 0.3% as well, after no change in May.

BUSINESS INVENTORIES

Thursday, July 15, 10 a.m.
Inventories held by manufacturers, wholesalers, and retailers likely rose 0.2% in May on top of a 0.1% advance in April. Factories have already reported a 0.3% gain in their stock levels in May.

MERCHANDISE TRADE DEFICIT

Friday, July 16, 8:30 a.m.
The trade deficit probably shrank only $9.5 billion in May after it exceed the $10 billion mark for two months in row. The MMS economists project th exports rose in May, after declining 1. in April, and imports fell slightly f the second consecutive month.

INDUSTRIAL PRODUCTION

Friday, July 16, 9:15 a.m.
Industrial output probably dropped 0.1% in June, after rising 0.2% in M The decline is suggested by the fall factory jobs and a shorter workweek June. Operating rates likely fell to 81. last month, from 81.6% in May.

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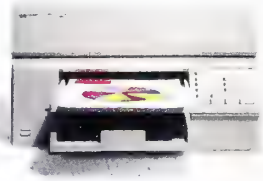

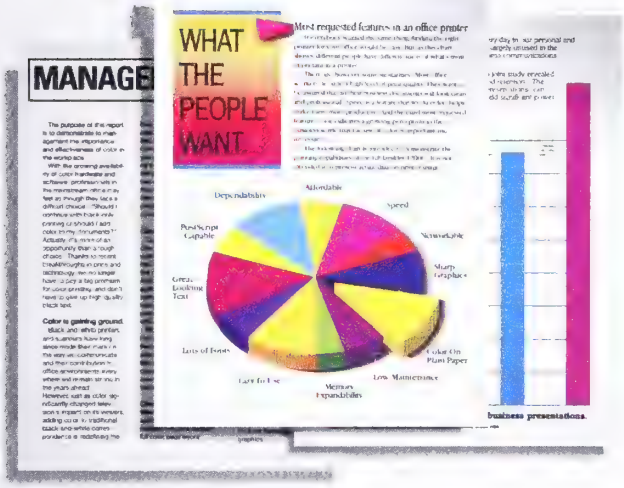

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PROCTER & GAMBLE HITS BACK

ITS DRAMATIC OVERHAUL TAKES AIM AT HIGH COSTS—AND LOW-PRICE RIVALS

These are heartbreaking times for brand marketers. Consumers seem to have fallen out of love with the soaps and the cigarettes they once were so enamored of. More and more, they're spurning products they grew up with for the siren call of cheaper rivals—and finding the savings sweet.

So is this the end of our long affair with premium brands? Some marketers seem to be acting that way. Philip Morris Cos. recently slashed the price of Marlboros by 50¢ a pack to compete with cut-price smokes. But Procter & Gamble Co., the king of consumer brands, would dearly like to avoid that marketing equivalent of stepping off lover's leap.

Instead, P&G Chairman Edwin L. Artzt has been revamping many of the company's time-honored selling techniques in response to the penny-pinching 1990s. In a series of moves that have jolted retailers and are being closely watched by rival marketers, P&G is slashing its promotional spending, culling weaker brands, and pushing to cut manufacturing and administrative costs. By slashing what it increasingly sees as unproductive marketing expenses, Artzt figures, P&G can apply the savings to price reductions. Those cuts could help P&G stem the erosion in its U. S. sales growth (charts)—without committing Marlboro's profit suicide. That's vital, in turn, to Artzt's global strategy, which is based on continued expansion abroad, funded largely by strong U. S. profits.

BRAND APOSTASY. Artzt is expected to outline key new elements of his plan at a rare presentation to analysts on July 15. He is likely to announce a major reengineering of P&G that will reduce management layers, streamline work processes, and cut staff by the thousands. He is also likely to trumpet signs that the new marketing approach that P&G began accelerating last year is starting to pa off in revitalized market shares.

And while he probably won't say s explicitly, it's becoming clear that P&G has been taking its marketing overhau even further than anyone reckoned Having hacked away at the discount and promotions it offers its retailers P&G has also begun cutting the welter o coupons and refunds it aims at consum ers. And in what amounts to virtua apostasy at a company that never gav up on struggling brands, P&G is consol dating some weak products with stron ger siblings, while dumping others Artzt's new mantra: "Consumers won pay for a company's inefficiency."

A cynic might say that's partly wha brand marketing has always been abou Shoppers were willing to pay a premiu for national brands because of the promise of quality and consistency. Tha price premium gave manufacturers fa margins to apply to advertising, trad

HOW P&G IS PUSHING VALUE

To regain market share and boost profits, P&G is aiming for lower, more stable shelf prices. The company figures that will cut the advantage of store brands and other inexpensive rivals.

SIMPLIFY PRODUCT LINES
P&G will trim slow sellers, such as 16-oz. liquid Cheer, and roll out fewer new items that are only marginally different from those already on the market.

DRASTICALLY REDUCE USE OF COUPONS
P&G has already sharply cut coupons for Pampers and Luvs diapers.

nsumer promotions, and profits. ısumers have grown to see prod- many categories as pretty much ne and increasingly shop for the st offering—whether it's a nation- d on special or a store brand.

oll is clear. In P&G's biggest busi- lisposable diapers, private-label s have increased their market rom 21% to 31% since 1991, tak- f of that increase out of P&G's ıles of other private-label prod- ɔm cold medicine to cooking oil, so risen, according to market re- r Information Resources Inc. mers are getting back to basics," ıid in a speech last year.

ı. P&G has responded with an effi- lrive. It studied pit crews at the polis Speedway, for instance, and their lightning-quick methods of g parts and tires to reduce some cturing changeovers from two just two hours. Altogether, P&G ng to cut overhead by $750 mil- sed on today's sales.

rticular, though, P&G is reexamin- narketing system. Initially, Artzt on trade promotions—the dis- fees, allowances, and other gim- marketers offer retailers and ılers. From P&G's perspective, stem is hugely inefficient. It ome of the manufacturer's prof- e retailer. It often requires extra g on special packaging and han- Because it causes wild swings in ion—creating spikes when pro- are high and troughs when dis- are elimi- it raises c-

costs. And worst of all, since it has Dawn dish detergent selling for 99¢ one week and $1.89 the next, it makes consumers even more price sensitive.

So P&G started paring back those promotions in 1991, infuriating many retailers, who have come to depend on the promotions for much of their profits. Some took P&G products off the shelf; others cut their ads and displays of P&G brands. The immediate effect was major market-share losses.

AS ARTZT CUTS PRICES, CAN P&G AVOID DAMAGE?

But Procter also achieved major cost reductions by cutting price promotions. And by smoothing out production schedules, the steadier pricing should trim $175 million a year from production costs. Thanks to the savings, operating profits in the quarter ended Mar. 31 rose 11%, to $760 million, on sales that dipped 2%, to $7.4 billion.

The cost savings have given P&G the leeway to hit back at low-price rivals. In 1992, the company lowered diaper prices 12%, and Artzt announced further price cuts on Pampers and Luvs last April. P&G has been widening the assault: List prices for Tide and Cheer have dropped about 9% in the last few months. Artzt believes profits won't be affected in either category.

As Artzt is expected to tell analysts, the price cuts are paying off. The company says volume in the more than 70% of its brands that have switched to the new pricing model is growing faster than in the rest. And Procter claims its share in 21 of 31 U. S. product categories is up from last year, led by double-digit gains in detergent and shampoo. "The worst is over," says PaineWebber Inc. analyst Andrew Shore.

"SUPERB PROCTOID." More recently, Procter has been turning its gimlet eye on consumer promotions. From here on, it may use free samples to get buyers to try new products, but it won't be burying shoppers under a blizzard of coupons any longer. Again, it's using the savings to pare prices even further. "Coupons don't contribute to consumer value day-in and day-out, and those dollars are better used to drive lower shelf prices," a spokesman says. Altogether, P&G has cut spending on trade and consumer price promotions by 40%—in excess of $1 billion a year.

Procter is also aiming to streamline its brand portfolio, repositioning or even scrapping weaker brands while broadening the franchise of stronger ones. It's cutting the colors, flavors, and sizes of its 100 U. S. brands by 15% to 25%. It has combined Puritan oil with Crisco. It's killing its White Cloud toilet-tissue brand altogether, replacing it with a new Charmin Ultra. And P&G-watchers expect other lackluster brands are heading for the chopping block.

P&G isn't just wielding the ax. Artzt "is a superb Proctoid," as one former man-

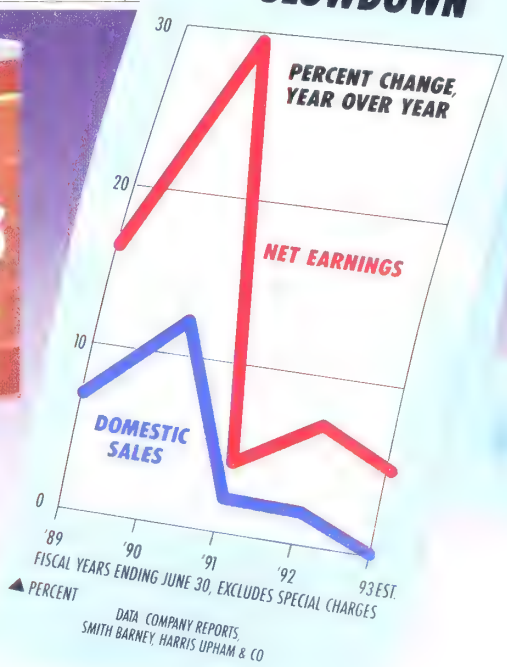
PHOTOGRAPH BY KATHERINE LAMBERT

COMBINE WEAK BRANDS WITH STRONG

That will allow P&G to reduce the cost of supporting separate brands. White Cloud becomes Charmin Ultra, Puritan becomes Crisco/Puritan.

CUT DISCOUNTS TO RETAIL TRADE

Trimming those discounts will give P&G room to lower list prices. The price of Folgers coffee, for example, has dropped an average of 10% to 15% since 1991.



ager puts it, raised on the verity that Procter invests heavily in new products, then advertises them to the hilt. The company has boosted its new-product introductions 30% in the past three years. Artzt has also maintained or slightly increased U. S. ad spending.

To be sure, P&G's rewriting of the marketer's handbook has its risks. By cutting trade and consumer promotions, P&G removes some powerful arrows from its quiver. That will make it "very readable, very predictable," and thus easier to compete against, says a rival. Others suggest that promotions are needed to drive sales and that Procter's moves to simplify product lines may leave too few choices for consumers—an inflexible "one-size-fits-all" approach, worries one P&G manager. Meanwhile, price pressure is growing in Europe where P&G hasn't yet taken the dramat cost-paring steps it's taking at home.

P&G knows, however, that consumer worldwide are no longer willing to pa the premium for a brand name they onc would have. Now, value is the way t woo. It may not be a torrid romance, bu at least it's an ongoing relationship.

By Zachary Schiller in Cincinna

THE EUROSION OF BRAND LOYALTY

The packages of Belgium's No. 1 coffee, Douwe Egberts, were marked down on a recent Saturday at a Delhaize supermarket in Brussels. But Nicole Verhasselt, a well-dressed fiftysomething widow, stood on tiptoe to snare the last pack of Delhaize's house-brand, Mariana. At 40¢ less than Douwe Egbert, a coffee owned by America's Sara Lee Corp., Mariana certainly appealed to Verhasselt on price. But the real reason she chose Mariana, she says, is that "it just tastes better."

The simple shopping choices of Mme. Verhasselt and millions of Europeans like her are creating what is probably the biggest postwar crisis that big brand marketers such as Procter & Gamble and Nestlé have yet faced. After years of watching store brands make steady gains in market share, the big multinational marketers are suddenly facing slow growth or worse, as the trend toward off-brand buying spreads from big Northern European nations, such as Britain, France, and Germany, south to Spain and Italy, where retailing is rapidly modernizing. Adding to the urgency is Europe's deep recession, which is driving shoppers to demand more value than ever. Once-strong consumer stocks such as that of France's Groupe BSN have been sinking on fears of the new price wars' impact on profits.

It's an enormous challenge, amplified greatly by the fact that such multinationals as Philip Morris, Nestlé, Unilever, and Procter & Gamble face the same fight in the U. S. But in Europe, the marketers partly brought this headache on themselves. Says William Currie, an analyst with London broker Barclays de Zoete Wedd Ltd.: "Some manufacturers have pushed through hellishly high price increases in recent years beyond product value and are allowing private-label goods to undercut them."

By some estimates private-label goods now account for as much as 32% of supermarket sales volume in Britain and 24% in France. French retail giant Carrefour already sells 3,000 in-house products, ranging from cooking oil to car batteries, at prices some 15% lower than national brands. And it's not just relatively simple products such as coffee where big marketers feel the pressure. This year, British retailer J. Sainsbury PLC has introduced a detergent good enough to grab 30% of the home market, jumping ahead of unilever's Persil and just behind Procter & Gamble's market leader, Ariel.

The response of some brand-name manufacturers to all this turmoil has been to hedge their bets. Already, some weaker brand-name companies have offered to become private-label suppliers to Ahold and other retailers. And even stronger players can't resist the temptation to trade wit the enemy. United Biscuits PLC, mak of Keebler cookies, now gets about quarter of its sales in Britain from doir private-label work.

Only companies with the best-ma aged brands will survive the shakeo by coming up with product innovatior that retailers find difficult to matc Campbell's, for example, is working c new luxury food products. One examp is Biscuits Maison, a Pepperidge Far type cookie with fat chunks of Belgia chocolate. Switzerland's Nestlé hopes $400 million investment in its Casa Bu toni line will produce a winner of fres pasta meals based on recipes develope by Italian chefs.

MEGAPRODUCT. The big marketers a also renewing their push to develop E rope-wide brands. Sara Lee, for exampl is pushing Douwe Egberts coffe through Europe. Yet adapting to loc tastes remains essentia Douwe Egberts' beans a toasted less in the Nethe lands and Germany, while Greece they are ground the consistency of talcu powder. Still, Sara Lee sav money as a big buyer beans. Managers of such m gabrands also save on man facturing, promotion, and budgets.

Other marketers are cu ting costs in other ways. Ne tlé, for example, is consolida ing manufacturing in b superregional plants inste of making products country by count Unilever Co-Chairman Floris Malje says the Anglo-Dutch giant is also wor ing to keep manufacturing costs at ro bottom and to drop altogether the pro ucts that offer the lowest margin That's wise. In the Old World, as in t New, it's nothing but tough slogging f marketers these days.

By Patrick Oster in Brussels, w Gabrielle Saveri in Rome and Jo Templeman in Bonn

NEW GAME PLAN

How European marketing is changing

DISTRIBUTION New deep-discount chains in Britain are challenging traditional full-price supermarkets, while German discounters are spreading to France

PRIVATE LABEL Products sold under stores' labels comprise 30% of supermarket sales in Britain and are rising in France, Switzerland, and Italy

EUROBRANDS Major U.S. and European marketers are using their clout to attack local brands with products designed for the whole European Community

DATA: COOPERS & LYBRAND, BUSINESS WEEK

A PARISIAN SHOPPER CHECKS OUT CARREFOUR'S IN-HOUSE CEREAL BRAND

WHAT IF APPLE HELD A SOFTWARE SALE AND NOBODY CAME?

may license its prized Mac operating system—if it can find takers

Apple Computer Inc., under pressure to bolster profits, is considering a radical move to drum up oney—licensing out to other personal-mputer makers its crown jewels, the acintosh operating system. Once, such chnology-sharing from Apple was unainkable. Now, it's unclear who out ere wants the stuff. "It's too little, too te," says one PC executive.

Apple declines to comment, but three ajor PC makers say they have been proached with a proposal to put the ac software, which introduced the use graphical computer commands, on eir Intel Corp. microprocessor-based mputers. Such a move would repreent a dramatic strategic turnabout for pple. For 17 years, the Cupertino alif.) company has zealously guarded s easy-to-use software, which effective- differentiated its computers from the n-of-the-mill PC crowd. Even better, by eeping the Mac software proprietary, pple was able to charge 20% to 40% ore for its PCs.

But those days are over. Windows, a mpeting software program developed Microsoft Corp., has won widespread ceptance. Its design effectively mimics e appealing graphics and intuitive opration that used to make the Mac nique. The result: Apple has had to wer Mac prices, putting the squeeze on cond-half profits, which will fall below ose of a year ago.

HARGES COMING? To adapt to a changg world, Apple has vowed aggressive untermeasures. So on July 6, it anunced that some 2,500 workers, or % of its work force, would lose their bs. Apple also said it would examine ays to reorganize. It won't elaborate, t analysts figure the company will erge some operations and kill iffy delopment projects. Resulting layoffs, all Street figures, will require a $250 illion restructuring charge for the arter ended June 25, triggering a $65 illion loss. In last year's third quarter, pple earned $131.7 million.

In another time, licensing its software ight have cushioned Apple's earnings ock, allowing it to collect software yalties with profit margins typically ice those of its PC hardware. It could so have broadened the market for its aris applications software.

Today, though, at least three of the PC akers Apple approached say they're not interested in licensing the Mac operating system. None of the talks, they say, reached the point of financial negotiations. "The moment of opportunity has passed," says a PC executive. Three years ago, the computer manufacturers say, they would have leapt at the chance to license the software. But while Apple wrestled with the move, Microsoft swooped in with Windows. Some 1 million copies of the program are now sold every month. "Apple gave Microsoft years to get it right," says Tim Bajarin, president of market researcher Creative Strategies Research International. "Now they're paying for it."

The delay reflects a fundamental philosophical rift within Apple's technical ranks. Engineers began working more than a year ago on "Star Trek," a project aimed at developing a prototype of Mac software for Intel 486-based machines. The prototype is up and running today, though neither Intel nor Apple will comment on the effort. But Apple hardware developers vehemently oppose the technology, says one company insider, arguing that it would nullify the Mac's distinguishing features.

Says one former executive: "Granted, it would be a real Pepto-Bismol move. But it makes perfect sense"

Apple software developers, however, disagree. They believe that licensing the system programs would broaden the base of Mac software users, making it more attractive for developers to create Mac applications, such as word-processing programs. The wealth of new applications would, in turn, increase Mac hardware sales. Proponents inside the company say this could push Apple's market share to 20%, from 13% today. Says one former Apple executive, admitting the strategy's inherent risk: "Granted, it would be a real Pepto-Bismol move. But it makes perfect sense."

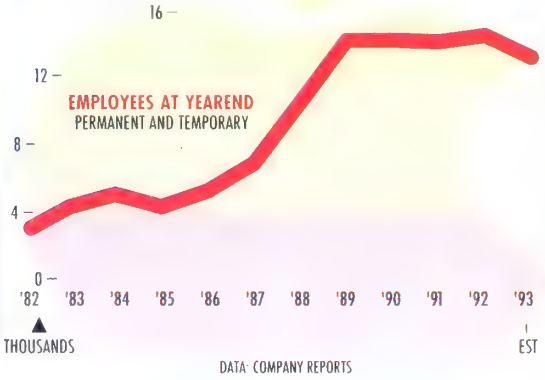
NEW BREED. Risky or not, Apple also is considering licensing its Mac software to other PC makers that use the PowerPC chip—a lightning-fast microprocessor being developed with IBM and Motorola Inc. Windows doesn't work with the PowerPC yet, so the Mac operating system could help establish PowerPC as a serious player as it comes up against rival chips, experts say. And customers definitely are interested in this technology. "That's a different kind of animal entirely," says one PC executive who shunned the notion of Mac software on Intel-based PCs but is warming up to the idea of Mac on PowerPC. Apple plans to ship its first Mac PowerPCs by mid-1994 and could license the software to others shortly thereafter.

If all this comes to pass, it says much about the new reality for Apple under Chief Executive Michael H. Spindler, who took the reins from John Sculley on June 18. Spindler doesn't want to dismantle hardware operations but is said to believe Apple should be capitalizing more on its software strengths. For now, he and Apple aren't elaborating. A spokeswoman says only: "We are looking to be more aggressive in licensing our system software technologies." That's one issue resolved. The next: Who's going to buy it?

By Kathy Rebello in San Francisco

NEW CEO SPINDLER: CAPITALIZING ON APPLE'S STRONG PROGRAMS?

APPLE STARTS PARING



PHOTOGRAPH BY ROBIN THOMAS LUSSIER FOR BW

DISASTERS

A DELUGE, BUT NOT A TOTAL DISASTER

The flood's effect on farmers, crops, and prices may not be so awful

FARMERS ARE SAVING WHAT THEY CAN

The corn on Gary L. Sandrock's 1,000 acres along the Green and Rock Rivers near Rock Falls in northwestern Illinois is usually waist-high this time of year. His soybeans should be thriving, too. But thanks to the worst flooding of the Mississippi River Valley in almost three decades, about 15% of Sandrock's land hasn't even been planted yet, and a seventh of his planted acreage could suffer reduced yields from water damage. Now, with the July 15 cutoff date for planting soybeans fast approaching, Sandrock's hopes of salvaging his flooded fields by sowing later-blooming beans may be crushed by continued rainfall. "Farming is always risky," says Sandrock, "but now we've got some real problems."

For evidence, turn on the tube. Residents of many river hamlets are boating to their homes. The U. S. Army Corps of Engineers has closed the Mississippi to commercial traffic from Dubuque, Iowa, to St. Louis, leaving hundreds of barges stranded upriver and the barge industry swallowing $1 million a day in carrying costs. A chunk of downtown Davenport, Iowa, remains under several feet of river water from the rain-swollen Mississippi. And President Clinton has declared parts of Illinois, Missouri, Iowa, Minnesota, and Wisconsin disaster areas, making them eligible for federal aid. No wonder. "I've got 700 acres, and I haven't been able to plant 350 of them," says Ronald Vroman, who farms near the western Illinois town of Erie. "Almost all of it has been under water at one time or another."

JITTERY. For the nation at large, however, the travails of farmers such as Vroman are giving rise to a different worry: inflation jitters (box). With business already concerned about the impact on the economy of Clinton's planned tax hikes and health-care reform, precious metals prices have been shooting up—both gold and silver are on the rise.

Even before the floods, heavy rains had been driving up grain prices for a month: Soybean prices jumped 21%, to $7.10 per bushel, between early June and early July on fears that many fields will be too wet to cultivate. The prices of corn and wheat also logged modes gains of 11% and 5%, respectively, dur ing the same period.

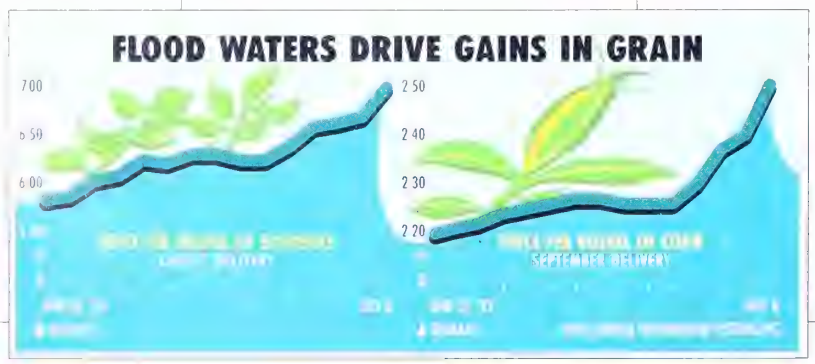
Now, the flooding is adding to th markets' nervousness. On July 6, 18 o the 21 commodities in the widel watched Commodity Research Burea index surged, resulting in the index largest gain in five years. Traders ar increasingly worried that the heav rains will continue, clobbering cro yields. Indeed, Daniel W. Basse, directo of research for AgResource in Chicag now expects that up to 2.5 million acre of soybeans may never be planted be cause of the rains. That's about 4% o the planting that was anticipated.

FULL OF BEANS. The total full impact o the flooding can't yet be measured. Bu the lasting effects may be less onerou than the market is expecting. For star ers, the estimated reduction in plantin from the flood may not have such dramatic effect on prices in the end: Th acreage planted to soybeans will prob bly only drop to near the 59.3 millio acre level that the federal governmen was expecting in March, for instance.

Moreover, farming is far less impo tant to the national economy than it onc was. It accounts for just 3% of U. gross domestic product. And even ad ing in the processing, distribution, an marketing that goes with ag product its share jumps to a still moderate 15 says Robert G. F. Spitze, an agricultur economist at the University of Illinois Urbana-Champaign.

Consumer prices probably won't be h that hard, either, because the raw mat rial cost of most grain-based foods is fraction of their supermarket price. Th price of wheat, for example, accoun for about 7¢ of the retail price of a lo of bread. In fact, rising grain pric could actually lead to cheaper superma ket prices of meat, as farmers glut th market, rushing cattle and hogs slaughter rather than continuing to fe them expensive grain.

The whack to the Midwestern econ my could be far greater, of course—b only if dramatically high rainfall conti ues over the next few weeks. To sure, farmers are worried that th year's cool weather and teeming rai will hurt their yield But some 90% of t Midwest's farmland ready has been seede The big danger no isn't the flooding se on TV. Rather it's th the widespread pooli of water in fields a drowning of your crops will worsen if t rains continue.



With luck, the effects of the disaster ıould be limited, even in the Midwest. he crisis of the early 1980s weeded out ıany of the weakest farmers. And the ıidwestern states, once dependent on griculture for their bread and butter, re now well diversified. "This isn't 30 ears ago, when our economy was heavi- farm-based," says Iowa's State Econo- ist Harvey Siegelman.

Iowa is a case in point. Siegelman fig- res the flooding there could have a ross impact of about $700 million—far om a huge hit, given that the gross ate product is $55 billion. And in the ajor farm state of Minnesota, figures orwest Corp. economist Larry J. Wipf, op losses will shave no more than two- nths of a percentage point from the 2% 2.5% job growth he's predicting for e state this year.

ODEST GAINS. Ironically, many individ- al farmers could actually benefit from e weather disaster. That's because fu- res prices for some farm goods have ared (charts) as traders speculate that e bad weather will translate into re- ced harvests. Plenty of farmers only ildly hit by the lousy weather could coup their lost yields through higher op prices, if the prices hold until har- st. Many of them "could actually get e best of both worlds—high prices and entiful rain to boost their own yields," edicts Basse.

Farm prices are notoriously volatile, course, but some observers figure ey could stay high through the sum- er. That's because many prognostica- rs are predicting more rains in the up- r Midwest, which would cut further to yields. That, coupled with dryer- an-normal weather in the South and elta regions, could "offset the Mid- est's low yields," says Basse. And if uthern weather falters, Basse figures, me farm prices could go even higher.

In the meantime, federal help is on the ay. On July 4, Clinton told a town eeting of farmers in Eldridge, Iowa, at he will make available another $297 illion in emergency flood relief, on top $100 million in federal disaster funds. nd Agriculture Secretary Mike Espy id the Administration will ask Con- ess to appropriate another $850 million aid.

Still, such future help is cold comfort the Midwestern towns and farmers ill fighting the river's wrath. Officials Davenport, perhaps the hardest-hit y, forecast that flood-related costs ere alone could approach $100 million. d even that's a guesstimate. Explains d Whitfield, the city's weary emer- ncy services chief: "Right now all we ve time to do is worry about stopping e water." There'll be plenty of time er to tally the losses.

By James E. Ellis in Davenport, Iowa

Commentary/by Karen Pennar

DON'T LET THE GOLD BUGS GIVE YOU INFLATION NIGHTMARES

What does gold signify?

For decades, the debate has raged unresolved: Is gold a barbarous relic or a store of value? A flashy symbol of wealth or a harbinger of inflation? After years of quiescence, gold has begun climbing in recent months and is again a focus of attention. Rising waters on the Mississippi not only pushed soy and grain prices higher but also led speculators to bid up gold, silver, and platinum to higher ground. Now, as gold flirts with $400 an ounce, it's inevitable that people remember the late 1970s, when it surged past $800. Does the rising price of gold signal a new inflationary cycle?

It doesn't. There are plenty of reasons, on both the supply and demand fronts, why prices have risen. And while some analysts, such as Georgia State University forecaster Donald Ratajczak, believe gold is already overpriced, it's still possible gold will climb past $400. Nonetheless, the 1990s are not the 1970s *redux*.

$400 an ounce? Maybe. $800? Forget it

The reason is simple: Economic fundamentals around the globe spell disinflation, not inflation. The U. S., Britain, and Canada are having halting recoveries, Europe is deep in recession, and Japan is stumbling. Central bankers, meanwhile, are hewing fast to their firm anti-inflation stance of the 1980s, easing interest rates ever so grudgingly. China and the emerging markets of Asia are churning out low-cost goods, and plentiful labor worldwide is depressing wages in industrialized nations. "This is hardly a backdrop against which prices can flare in a lasting fashion," says Henry Kaufman of Henry Kaufman & Co.

EASY TO CARRY. There is one place where demand for gold may in fact be linked to inflation: China. There, analysts believe, boom times, rising prices, and a strong cultural affinity for gold as a store of value have spurred gold purchases. With the Chinese government's ability to combat inflation—as well as its political viability—in question, that demand is sure to be sustained. And Chinese fleeing their homeland can carry their wealth in the form of gold jewelry, just as émigrés the world over have done for centuries.

Demand is also being propped up by investors who are finding that, as real rates of interest fall toward zero, the opportunity cost of buying and holding gold is evaporating. Thus, investment managers who for years have shunned gold are stepping in. And some are rushing, herdlike, to follow such super-investors as George Soros, who in April bought a stake in Denver's Newmont Mining Corp. Finally, disillusionment with the industrial nations' leadership may be prompting some gold purchases.

On the supply side, meanwhile, the Russians and the Eastern Europeans aren't liquidating gold stocks. And producers such as South Africa are paying mine workers better wages than before. But those higher costs have driven up the threshold price, at which producers find it worthwhile to pump up output, from $350 to $400 an ounce. Taken together, those factors have prevented any dramatic additions to world stocks. So it's unsurprising that gold prices are approaching $400 an ounce.

The gold market has a life of its own. But if you want a clue to future inflation trends, check out the price of another kind of gold: black gold. "We use oil every day. Industry uses it, and consumers use it. And the price of oil isn't going anywhere," says Kaufman. There just isn't enough demand in the world, it seems, to push the price of oil much above $18 a barrel—its lowest level since the gulf war. So long as oil prices are steady and the economic fundamentals remain dismal, inflation just isn't a threat, no matter what the price of gold is doing.

Senior Writer Pennar covers economics from New York.

BRYAN F. PETERSON/THE STOCK MARKET

'PEOPLE WILL PAY MORE TAXES TO GET THE BUDGET BALANCED'

Ross Perot on Clinton, NAFTA, health care, and Ross Perot

There is a frenzy in the terminal of Baltimore-Washington International Airport this steamy July 6. Crowds surge forward to catch a glimpse of the compact figure lugging a briefcase. He's besieged by autograph-seekers, all pressing forward to shake his hand and exchange pleasantries. A rock star? Nope, it's Ross Perot, whose independent movement has defied political oddsmakers and transformed him into a force in American politics. In an hour-long interview with Washington-based Senior Editor Lee Walczak, Perot expounded on trade, economics, and his future—and tried hard to muster some enthusiasm for Bill Clinton. "Are you running for President?" shouted a bystander as the session concluded. "I'm running for Texas," Perot said. Then he stepped aboard a Dallas flight and was gone.

Q *Republicans are setting up a Perot-like grass-roots group. And a new Democratic Leadership Council study warns that unless President Clinton adopts more conservative policies to attract the Perot vote, he risks political disaster. What do you make of this?*

A I laugh every time something like this comes up. What are these people worried about? All they've got to do is respond to the concerns of my supporters. Actually, I consider this constructive. It focuses attention on the issues we're talking about.

Q *The DLC wants Clinton to focus on a few key areas, the foremost being creating private-sector jobs. Good idea?*

A Yes. But the President should not be trying to pass legislation that conflicts with this goal. If you're $4 trillion in debt and your plan never balances the budget . . . this is not what the people want. People will pay more taxes to get the budget balanced—not to play games.

Q *I gather you think the President's economic plan could be improved?*

A No bill should be passed that does not balance the budget. The current Clinton plan does not balance the budget—ever.

Q *How quickly can it be balanced?*

A Even if it takes six or seven years, we should accomplish this goal. The interesting thing is how street-smart the American people are. Clinton's deficit-reduction trust fund has no credibility.

Q *Should the President be more assertive with Congress, fighting more and schmoozing less?*

A Absolutely not. Never threaten people, like they did in the House with the threat of taking away committee chairmanships. That really offends people at the state level and makes congressmen who stand on principle local heroes.

Q *You've been critical of the President's performance in the past. Why so quiet lately?*

A I did nothing during the first few months except try to be supportive. Before the newspaper editors convention on Mar. 31, I said he should apologize to the general who was allegedly insulted by a junior White House aide. That would help heal the rift with the military. The next day, Clinton called me an abject liar. I figured at that point, he was seeking confrontation.

Q *You said that in the private sector Clinton's only qualified to be a middle manager. Still feel that way?*

A In one of the debates, I said his experience wasn't relevant to the job he was going into. It's probably a waste of time to say things like that, so I don't anymore.

Q *Last fall, you advocated hiking the gasoline tax 10¢ a gallon per year over five years. Do you still back the idea?*

A I laid out the bad news during the campaign. Clinton laid out the bad news after he got in office. That does not go down well with people. I said in the debates if anybody has a better idea than the gasoline tax, I'm all ears.

Q *Have you heard one yet?*

A No. But there could be one.

Q *Your United We Stand group played a key role in the recent Texas senate race. Will we see more of this?*

A We staged these debates all across Texas. Then we said to our members "If you feel strongly that we should support one candidate, let us know," a

4% chose [eventual GOP victor] Kay Bai-
ey Hutchison.

Q *What role will your state affiliates lay in the '94 congressional elections?*

A It will vary from state to state. Our nembers have a lot of freedom. We ave some states that are now pre-ccupied with local elections. This is ood basic training.

Q *Critics, including some disgruntled x-volunteers, allege that UWS's grass-oots sheen is phony—everything is entrally controlled from Dallas...*

A Untrue. You understand the opposi-on research team exists in the White Iouse. You understand that they feed nese stories to the media.

Q *You're a fierce foe of the North merican Free Trade Agreement. Vhat's your problem with the pact?*

A When you have a Mexican auto work-r making one-ninth as much as an merican worker, and there's no envi-onmental controls, no health care, no othing—if the union gets out of line, ou call in the government, they shoot a ew guys, cut the wages 45%. So if you ust want to make money, head south. he problem, as [House Majority Lead-r] Dick Gephardt says, is that at this oint, we can't do anything that would ower the standard of living of the merican people. I'll tell you how to do AFTA tonight. Have Mexico agree to ur wage standards, our employee bene-ts. Have them match us and Canada. hat would be a miracle in Mexico.

Q *How do you feel about President linton's health-care reform plan?*

A I haven't seen the plan, so I can't omment on it. But, if the $150 billion ost] number is real, forget it. We can't fford it.

Q *Back to politics. What are your houghts on another Presidential bid?*

A I don't even think about it. I'd like to e all of these reforms the two parties e talking about happen. If they really o this, the problem's gone away, right?

Q *You didn't seem to enjoy running r President much last time...*

A ... Does anybody?

Q *... But you could do it again?*

A You do what you have to do. I've one a lot of things in my life that I on't enjoy.

Commentary/by Paul Magnusson

NOW IS NOT THE TIME TO GIVE UP ON GATT

Question: What opened in 1986, was scheduled to close in 1990, had its "final act" in 1991, but is still playing? Why, it's the GATT talks, of course.

GATT. It stands for the General Agreement on Tariffs & Trade. Or the Gentlemen's Agreement to Talk and Talk. Whatever. The current negotiations among 115 nations have been grinding on for seven years. But what's this from Tokyo's G-7 summit meeting? A "major breakthrough" has occurred, says U. S. Trade Representative Mickey Kantor. The agreement "breaks the logjam on the Uruguay Round," crows President Clinton.

Well, not exactly. The preliminary deal to reduce a limited number of tariffs still faces many more hurdles. And those reductions are just a small part of a devilishly complex overhaul and vast expansion of the world's loophole-ridden trade rules. Third World nations want to end agricultural subsidies. The industrialized world wants to sell financial services unimpeded. And everyone wants relief from trademark piracy.

The payoff: a more efficient trading system that would enrich nations. The trouble is, every demand is seemingly linked to everything else, and the whole pact may still collapse of its own weight. Notes the European Community's trade minister, Sir Leon Brittan: "Nothing is agreed until all is agreed."

Still, as ugly and fractious as the process has become, the much-maligned trade talks are worth completing—even more so now that the world's economy is in a slump. Japan and Europe "need something to jump-start their economies, and this is their best chance," says Calmen J. Cohen, vice-president of the Emergency Committee for American Trade, a group of 50 large exporters.

In fact, trade liberalization on a grand scale is the one thing the G-7 nations haven't tried of late. Japan is hiking spending, Germany and France are cutting interest rates, and the U. S. is trying to cut its budget deficit. A GATT agreement could be less painful.

But to reach one, politicians must show more gumption than they did in Tokyo, where they shied away from some of the thorniest issues. Take textiles. The Clinton team backed off a Bush Administration proposal for a 50% cut on some textile tariffs. The Europeans countered by pulling back from an offer to slash tariffs on electronic goods. Meanwhile, both sides are clearly losing from such barriers. A typical U. S. family pays an extra $500 a year for its clothing. And European computer companies must pay a 14% tariff on semiconductors from the U. S., reducing their competitiveness and punishing European consumers.

At this late date, politicians can't continue to coddle American clothing makers and peanut growers, French farmers and telecommunications manufacturers, and Japanese glassmakers and sake distillers. "The biggest hurdle is courage," notes Julius Katz, a Bush Administration trade official. That commodity has been in rather short supply for the past few years. With the world economy sinking, it's time to mine a fresh lode.

Correspondent Magnusson follows economics from Washington.

At the economic summit: A "major breakthrough" on trade has many more hurdles ahead

AP/WIDE WORLD

DE LA VIERGE - VIENNOISERIE
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Commentary/by David Greising

FOR BASEBALL'S OWNERS, IT'S TIME TO SWING AT A TOUGH PITCH

Time was, the All-Star Game marked the start of baseball's glory days: pennant race time. Those times are gone. In today's cutthroat sports market, the All-Star break that starts July 12 signals the opening of football's training camps and, not long thereafter, pro basketball practice. Baseball won't command the national spotlight again until the World Series games begin in October.

Baseball's owners know the problems: too few teams in contention, too few interested fans, scant advertising revenue, and little or no profit at yearend. During their last meeting, in Denver in mid-June, the 28 owners addressed their immediate vexation by agreeing to an extra round of playoffs starting with the 1994 season. But it was progress, baseball-style: a small, cautious step that doesn't go far enough.

Now that they have agreed to a new layer of play-offs, the lords of baseball must move ahead promptly on other fronts. The owners, who have damaged the image of their sport with incessant poormouthing, should act on interleague play, new divisional formats, and another round of expansion. And they must come to grips with two make-or-break issues, revenue sharing among clubs and improving relations with players, before expiration of the current labor contract puts the 1994 season in jeopardy.

PETRIFIED SPORT. For now, at least, owners can offer only the new play-off concept, minus the pertinent details. It's a measure of the sport's petrified state that the owners can create a huge fuss out of a seemingly obvious maneuver: building the gate in September—baseball's dullest month—by expanding the number of play-off teams. It's an issue that other sports, football and basketball in particular, addressed easily years ago.

In a unique way, baseball has made itself captive to a group of fans—and even owners—who view change as a matter of suspicion, if not sacrilege. These purists complain that a playoff expansion will cheapen the game. And they express outrage at the thought of a "wild card" team winning the World Series. Well, two wild card teams, the 1966 Kansas City Chiefs and the 1980 Oakland Raiders, have won football Super Bowls, earning broad acclaim from fans. And what's one of the few complaints about pro basketball? That the play-offs are too predictable: The same teams always win.

Baseball's purists are dead wrong. Fans are ready to embrace experimentation: The league's own polls show that much. And the only poll that counts—the huge number of fans flocking to see the new expansion franchises at home and on the road—is further evidence. Heck, if baseball fans can learn to put up with the designated hitter, they'll put up with anything. It's a lesson the owners should take to heart, and soon.

They've got to move on several fronts at once. The big issues—revenue sharing and player relations—demand immediate and close attention. Richard Ravitch, baseball's labor negotiator, is goading owners into a revenue-sharing agreement so he can sell the concept of a salary cap to an extremely skeptical union. The league today is a divided tribe of haves and have-nots: Big-city teams bid up player salaries and rake in big-buck TV contracts, while their country cousins struggle to get by. The lopsided playing field creates constant feuding and, at worst, the piecemeal evisceration of franchises like the San Diego Padres. "If revenue sharing doesn't happen, then everybody will continue to fight with each other, the players, the clubs, the big-market teams, the small-market teams," Ravitch says. "It will be a disaster."

> Owners are terrified of change—and assume fans are, too. They couldn't be more wrong

Even so, the owners can't focus on strategic issues to the exclusion of other concerns. Details on the new play-off formats are essential before those postseason games can be sold to advertisers. Divisional realignment and interleague play would help the leagues capitalize on the natural geographic rivalries that currently lie fallow. Indeed, success on the less sweeping issues will make the broader concerns worth fighting about.

Trouble is, baseball's executive suites lack leadership. Progress falls to its death in the schisms between big-market teams and boondock also-rans. And the ersatz commissioner, Milwaukee owner Bud Selig, must run his own troubled franchise while trying to force change on recalcitrant peers. The result: The sport's most progressive move to date—a joint venture that grants NBC and ABC exclusive television broadcasting rights on 12 regular-season dates—nearly succumbed to fratricidal squabbling.

One way or another, baseball will change. It will become a nostalgic timepiece for a loyal few or an updated diversion for the many. Safe or out? It's up to the owners to make the call.

David Greising covers the big leagues from Chicago.

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DIAMOND TREASURES

Estimated prices of items to be sold at the National Sports Collectors Convention Auction, July 22 and 24 in Chicago

1918 World Series ticket stub	to $500
Bill Clinton autographed ball	to $500
1968 3D Tony Perez card	$900 to $1,000
1940s Detroit Tigers' usher's hat	$1,200 to $1,400
1915 Red Sox World Series program	$3,000 to $4,000
Honus Wagner autographed ball	$3,500 to $4,500
Bat used by Hank Greenberg	$5,000 to $6,000
Nolan Ryan's 1993 Texas uniform	$10,000 to $15,000
1933 Napoleon Lajoie card	$47,000 to $50,000
Babe Ruth's 1938 Dodgers' uniform	$200,000 to $250,000

DATA: LESLIE HINDMAN INC.

NORTHWEST AIR FLIES OUT OF THE GLOOM . . .

▸ Surprise: Northwest Airlines may not file for Chapter 11, after all. After months of gloom-mongering, the carrier on July 6 announced a deal with the Air Line Pilots Assn. that will cut its labor costs by $365 million over three years. The bulk of that—some $300 million—will come from a 15.5% cut in pilot wages, with the rest made up by work-rule changes. If the same deal is O. K.'d by the Teamsters and the Machinists—Northwest's other major unions—the additional cuts would equal nearly $500 million. Sources close to the negotiations say the Machinists are likely to sign on eventually. If they do, Northwest will sport one of the industry's lowest cost structures, partly because creditors and banks have agreed to postpone more than $1.7 billion in payments. If the union doesn't play along, expect the bankruptcy talk to start flying again.

. . . AND WANG MAY EVEN SEE BLACK INK

▸ Incredibly, Wang Laboratories may be on its way to recovery. The fallen computer maker announced on July 7 that it plans to raise $100 million in debt and equity to finance a move out of Chapter 11. Wang's reorganization plan calls for issuing 30 million new shares, mostly to creditors who hold about $2 billion in debt. They may recoup 95¢ on the dollar. Current stockholders would receive warrants to purchase new shares. Meanwhile, former Senator Paul Tsongas (D-Mass.) and venture capitalist Peter Brooke will join a new nine-person board that includes former Ross Perot adviser John White. In the plan, company officials put Wang's post-Chapter 11 valuation at $375 million. Even better: In the fiscal year beginning Oct. 1, Wang executives project operating profits of $53 million, vs. an expected $200 million loss in the year ended June 30.

WHY ENGINEERS ARE POUNDING PAVEMENTS

▸ Remember how, in college, the engineering majors got all the terrific job offers? A lot of them are looking for work now. The Bureau of Labor Statistics said on July 2 that the unemployment rate for engineers during the second quarter was 4.4%—up from 3.4% a year earlier and the highest since at least 1982, when job categories were redefined. What's more, those figures understate actual joblessness, because they don't count engineerin graduates who are lookin for their first jobs. BLS econo mists say engineering unem ployment is up because o the sluggish economy, dow sizing, and the drop in mil tary spending.

BUT WILL THEY GET THEIR OWN WATER COOLERS?

The folks at Chiat/Day have always given the impression they'd rather be surfing. Indeed, the advertising agency's top creative guru is known for catching a few waves during lunch, and Chiat's striking new headquarters is conveniently just steps from the Pacific in funky Venice, Calif.

Soon, Chiat/Day's staffers may get to leave their offices for good. The ad agency recently informed workers that Chairman Jay Chiat plans to turn his shop into America's first virtual ad agency: Employees will work out of their homes or at clients' offices. Chia will provide everyone with personal computers and telephones while keeping a few meeting rooms and study carrels fo business that can't be handled outside. Employees will eve get lockers to store belongings. It's not the first time Chiat ha experimented with office design. His New York and Venic locations have open work spaces instead of offices. The Venic building, designed by architect Frank Gehry, boasts a fou story pair of binoculars as its main entrance.

Why go even further? Chiat likens the traditional offic with its regimented design, to a kindergarten. By giving hi workers more freedom, Chiat believes he can inspire his staff ers to be more creative and responsive to their clients. Not t mention, Chiat will be able to reduce his existing office spac by 40%. "Offices are a 19th century concept," he says.

CHAIRMAN CHIAT: PLANNING THE FIRST VIRTUAL AD AGENCY

ROCKS AND ROLLS ON THE RIVIERA

▸ There's a moral to thi probably. Beverly Hills bi lionaire Marvin Davis and h wife, Barbara, were vacatio ing in the French Rivie when gunmen hijacked the chauffeured Rolls-Royce July 4. The thieves' haul: jev els worth an estimated $1 million and $50,000 in cas The Davises were en route the posh Eden Roc resort Cap d'Antibes when their c got stuck in traffic and the were approached by the gu men. The moral: Next tim travelers' checks.

We Always Said That We Were Working For A Better Future Here At LTV. And Today, That Future Begins.

After nearly seven years, The LTV Corporation has emerged from Chapter 11 reorganization.

We are a new company, focused on flat-rolled, tubular and tin-plated steels, and on oilfield components and services.

Our reorganization came not without cost. We relied on the help, support and sometimes the sacrifice of many who've been associated with us through the years.

Thanks to the continued belief in us by our many customers, suppliers and employees, we made–and continue to make–some remarkable improvements.

In leading-edge quality. In productivity. In modern equipment.

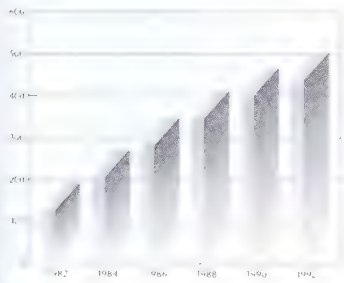
In short, we've created a stronger, more sharply focused company with what I believe to be a very promising future.

What we've accomplished.

The new LTV emerges as a major integrated steel supplier, especially of value-added products–carbon electrical steels, electrogalvanized steels and ultralow carbon steels.

We are the largest supplier of flat-rolled steel to the auto industry. In fact, we are the first steel company qualified by all auto manufacturers in the United States.

Tons shipped per employee



Since 1982, LTV employee output has increased 2½ times–making us a world leader.

Our company leads in shipments to the appliance and electrical equipment markets–some of the most quality-sensitive customers anywhere.

And, in terms of productivity, LTV employees are 2½ times more efficient than they were 10 years ago. LTV workers are now among the most productive in the world.

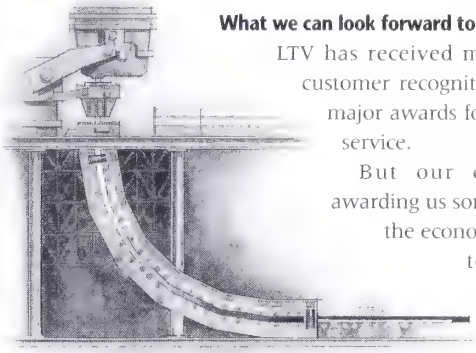
The steel of the future.

A big part of LTV's comeback can be attributed to state-of-the-art technology. For example, we now have the newest, widest continuous annealing line in America, giving us the capability to produce the new generation of lighter and stronger steels.

We built two new vacuum degassing facilities, giving us one-third of the national market for the sophisticated high-tech steels.

Our new Direct Hot Charge Complex, with a new continuous slab caster, will start up in September, enabling LTV to compete head-on, in productivity, with any flat-rolled minimill anywhere. Not only will we be making higher-quality steel, but our new complex will cut costs by another $50 per ton.

Altogether we've invested over $2 billion in new equipment since 1986. And thanks to our creditors, we start fresh–with everything bought and paid for.



Our new continuous caster and Direct Hot Charge Complex will result in LTV steel being 100% cast.

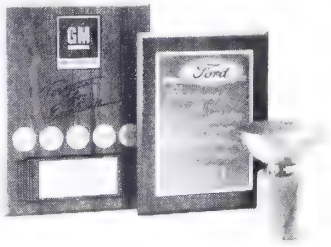
What we can look forward to.

LTV has received more than its share of customer recognition, winning over 100 major awards for excellent quality and service.

But our customers are also awarding us something else–orders. As the economic recovery continues to grow, many of our major customers are stepping up production.

Prices are beginning to increase to more reasonable levels. And to further strengthen our business, our company-wide cost reduction program has been intensified.

The future holds a lot of promise for LTV. We're proving it with our commitment to continually improve our products and services to satisfy our customers' needs 100% of the time. And we're backing it up with a 100% quality guarantee–the only one in the steel business.



Prestigious awards include the GM Mark of Excellence, Ford Q1 and RIT/USA TODAY Quality Cup Award.

We're determined to make LTV the clear leader in the North American steel industry. Keep an eye on us. Because today, our future really begins.

Dave Hoag

David H. Hoag, Chairman/CEO, The LTV Corporation

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EDITED BY STEPHEN H. WILDSTROM

THE SLIPPERY SLOPES OF CLINTON'S 'JOBS SUMMIT'

For a President who prefers to grapple with foreign policy only when it intersects with domestic economics, the idea was a master stroke. Just before Bill Clinton jetted to Tokyo for the Group of Seven conclave, he called for a "jobs summit": a high-level powwow at Camp David, patterned on last year's Little Rock teach-in on the economy, to discuss stubborn unemployment in the industrial world. Clintonites may think they can apply the town-hall format to the global economic village, with Mayor Bill presiding. But if the topic is jobs, the forum could easily disintegrate into the economic equivalent of Sarajevo.

The President and his longtime friend, Labor Secretary Robert B. Reich, envision a quiet, almost academic discussion among the G-7 economics and labor ministers, without any communiqués or deals. But that's not likely. European leaders, who've grappled with double-digit unemployment for years, see the issue as political poison—and fear that the summit will turn their top officials into TV props for Clinton. And while structural unemployment across the G-7 may have common roots, the only solutions likely to appeal to all seven governments are barriers to trade and immigration erected against the Third World—hardly the outcome the Administration seeks.

REICH ENVISIONS A QUIET TEACH-IN

SHARED DOWNSIDE. So why the idea? Clinton's concern about the "jobless recovery" here and the sluggishness abroad grew as he studied his briefing books for the Tokyo meeting. When Reich, a former Harvard academic, proposed an international seminar to look for common ground, the President "liked the idea right away," according to a top White House official.

In Reich's view, all industrial nations are suffering the downside of technological change. "Demand for labor has shifted toward those with education and good skills, and against those who lack skills," he says. The results show up in different ways: In the U. S., with its flexible labor and wage structure, the pay gap between low- and high-income workers has widened, while Europe, with rigid wages and bountiful social benefits, faces 11% unemployment. "These are all aspects of the same problem," Reich says.

But solutions could be hard to come by. The G-7 can't make headway on economic stimulus or the tough trade issues that could get the world economy growing faster. Even united Europe can't get its employment act together: Britain and Germany want to streamline labor policies that clog job-creating arteries, while France stumps for stimulus spending that recession-strapped governments can't afford.

In their search for common themes, the summiteers run the risk of finding only a common enemy: developing countries. "Many in France are already pushing the idea that cheap Third World labor is the problem," says Harvard University economist Robert Z. Lawrence. That should come as no surprise to followers of Ross Perot, who charges that the North American Free Trade Agreement will send American jobs to Mexico. The conference could also lend force to a burgeoning movement in Germany and France to target immigrants as the source of high unemployment and domestic unrest.

Clinton's powwow could be dismissed as a public-relations exercise—but it could backfire on that front, too. Holding up Europe's social policies as a model will also shine a light on the 22 million who are jobless as a result of Eurosclerosis. And while Clinton has gotten through his first six months largely by radiating empathy, voters are starting to hold him to a higher standard. He may one day count himself lucky if his G-7 counterparts diplomatically decline his kind invitation.

By Mike McNamee, with Bill Javetski in Paris and Owen Ullmann in Tokyo

CAPITAL WRAPUP

POLITICS

Could there be a Bush comeback brewing? No, we're not talking about the ex-President. It's the kids. Two former first sons are mulling over gubernatorial campaigns in 1994. In Florida, Jeb, the state's former Commerce Secretary and Dade County GOP chairman, is preparing to take on embattled Democratic Governor Lawton Chiles. Meanwhile, George W., best known as the Texas Rangers' owner, is laying the groundwork for a bid to unseat Democratic Governor Ann W. Richards, who is famous for her 1988 quip that Poppy Bush was "born with a silver foot in his mouth." George W. is 0-for-1 as a politician, having lost a 1978 bid for the U.S. House of Representatives to Kent Hance, who is now a potential rival for the GOP gubernatorial nomination.

HEALTH

The "Hillary effect" on medical inflation may not be the one that analysts are ballyhooing. Some experts speculate that medical inflation is cooling off because the specter of Hillary Rodham Clinton's health-care reform is keeping doctors and hospitals in line. In fact, medical costs spiked up 0.8% in May alone, largely because doctors who hadn't raised their fees for a while did so. Were they trying to slip in the increases before Washington slaps price controls on medical charges?

WHITE HOUSE

It has become a Washington ritual: Once a week, usually on Wednesday, President Clinton invites a gaggle of chief executives to lunch. After some off-the-record chitchat, a few trek out to the driveway to mutter kind words for the President's embattled economic plan. But now that the budget is nearing passage, Administration sources say the encounters might be scrapped in favor of less frequent get-togethers. The shift could also mean it's getting tougher to find supporters for the tax-heavy economic package.

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EUROPE FOR SALE

A PRIVATIZATION DRIVE COULD RAISE $150 BILLION

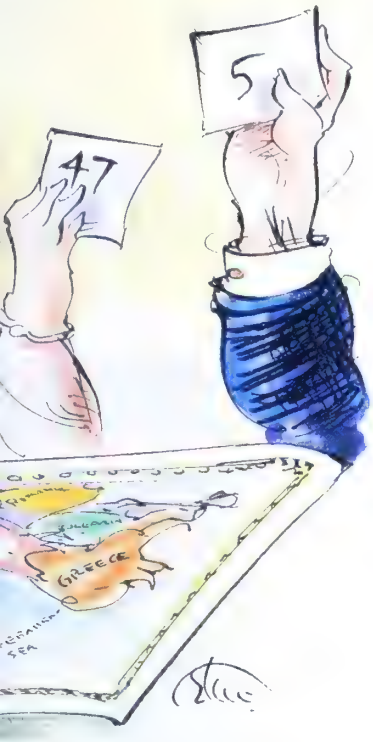
Psst... has Europe got a deal for you. Matter of fact, it has at least 100 major deals, many of them poised to trip over one another for attention in the world's capital markets. Squeezed by budget deficits and eager to taste the fruits of free-market competition, Western Europe's governments are about to begin a massive sell-off of state companies. This final round, following sales in the 1980s, aims to pour a mighty $150 billion into needy treasuries over the next few years. That assumes markets are willing—a big if.

Although the financial goal is ambitious, the ultimate payoff for Europe's economy should be even weightier. Industrial giants that have accepted state aid in return for giving employees civil-service-style job protection will emerge from their cocoons. They'll have greater access to capital markets and the freedom to become efficient. Their global competitiveness seems sure to improve. The hard part: stepped-up layoffs and rising social tensions as privatized companies shrink payrolls. What's about to happen, in fact, may be the end of Europe's era of mixed private and state enterprise. "It's an enormous chance for Europe," says Bruno Roger, general partner at Lazard Frères & Co. in Paris.

GEMS FOR SALE. It's also an enormous profit opportunity for Lazard—and for the world's other investment banks, including the heavyweights from the U. S. All have launched intense lobbying campaigns to help manage the sale of Europe's state jewels, from French aut maker Renault to Italian oil giant AGI (table). The prize: fees that could ult mately reach $5 billion.

With the most glittering list of compa nies on display, France will start it huge sell-off in September. It plans t raise $7 billion by the end of this yea and $50 billion more over the next fiv years. Cash-strapped Italy hopes for similar amount, though the skeptics ar many. Germany thinks it can sell its tel communications company, Deutsch Telekom, for as much as $40 billio starting in 1996—considerably mor than the $22 billion value put on it b Morgan Stanley & Co. From Greece t Denmark, virtually every European gov ernment has something to unload.

Chasing Europe's privatization bonan za "is the most important thing we ca do," says Charles Stonehill, managin director of Morgan Stanley Internation in London. European governments wi dole out the lion's share of the busines to national firms. But the U. S. mark will be critical, with so many shares t sell, so Wall Street firms could shar heavily in the take. In the case of Ital with thin national markets, bankers est mate that foreign investors may have t soak up 75% of offerings. In addition t fees, foreign firms covet prestige. "Wi ning an advisory role on these deals se



u up forever with other clients," says ers D. Butler, head of the Paris office Britain's Baring Securities Ltd.

But the bottom line will be selling ares—and that may prove to be tricky. rope's vast thirst for cash could well tstrip the world's ability to buy—espe- lly with competing privatizations un- r way in Asia and Latin America.

Another obstacle is Continental inves- 's' traditional preference for fixed-in- ne instruments over equities. But fall- g interest rates will help. To lure fixed- ome investors, France is using a ver device: Those who buy bonds in a rrent $7 billion issue can convert them stocks of privatized companies, avoid- g capital gains taxes if the shares are d for five years. Demand is so hot it sales could approach $20 billion.

ERYTHING GOES. In Italy, observers ir political turmoil and elections, due next spring, could slow the planned e of seven major companies and ces of many more. But Italy's key vatizer, Chairman Romano Prodi of huge IRI state holding company, is ning to get started. Tapped last May take IRI's holdings public, Prodi says goal is to "sell, sell, sell." If a major vatization program isn't under way next spring, he vows to quit.

To test the privatization waters, ince last month sold 30% of a bank, Crédit Local de France. Offered at 6% below market, the $730 million issue was oversubscribed seventeenfold. Another smash hit was Spain's May sale of the bank Argentaria. And Britain's current sell-off of the last state holding in British Telecommunications PLC seems headed for oversubscription as well.

To keep the cash flowing, money managers say governments should learn from Margaret Thatcher. Britain's ex-Prime Minister privatized state companies at bargain prices in the 1980s, delighting voters who were able to resell shares to institutions for a quick profit. One drawback of that strategy is governments' need, as in Italy, to maximize revenue to replenish depleted treasuries. Another is the risk of stirring political outcries against selling too cheaply. Still, France seems likely to follow Thatcher's teaching. Analysts are betting that its early list, to be announced this month, will include Elf Aquitaine, Rhône Poulenc, and Banque Nationale de Paris. IRI's Prodi is pushing through the sale of SME, a big food concern.

"BIG QUEUE." Later sell-offs could face trouble—especially since Europe's offerings are heavy in a few industries: banking, oil, and above all, telecommunications. "After the eighth or tenth telecom company, there won't be a lot of cash anymore," predicts Richard Davidson, European equity strategist at Morgan Stanley. "This is a very big queue."

To make sure they needn't stand in it too long, many privatization candidates are trying to spruce up their images. British Rail and British Coal are trying to focus more on the bottom line. And Renault is likely to push for an early merger with its Swedish partner, Volvo. Analysts say investors want to see details of that deal before buying into the French auto maker.

Lingering state control is a bugaboo for many investors. Belgium, for example, has put a bank and its state telecommunications company on the market but is insisting on job guarantees for employees. And France, giving in to nationalist pressure, is limiting to 20% the total shares in privatized companies that can be sold to investors outside the European Community.

Although such rules nettle many analysts, they doubt U. S. buying will suffer as a result. Many American investors are discovering foreign stocks. These now make up only 5% of U. S. equity portfolios but could hit 15% by the end of the decade, as Winthrop H. Smith Jr., chairman of Merrill Lynch International, predicts. Europe's privatization binge will help increase liquidity in Old World markets—a concern among many institutional buyers.

But the big winners of Europe's huge sell-off should be its corporate wards of state. Their managers are counting the weeks until the world's investors set them free.

By Stewart Toy in Paris, with John Rossant in Rome, Julia Flynn in London, and bureau reports

TOP CANDIDATES FOR THE BIG SELL-OFF

Company	Industry	Govt. stake (Percent)	Value of govt. stake (Billions)
FRANCE			
FRANCE TELECOM	TELECOM	100%	$21.5
ELF AQUITAINE	OIL	51	8.9
UAP	INSURANCE	75	6.1
RENAULT	AUTOS	80	5.6
BNP	BANKING	73	5.1
USINOR SACILOR	STEEL	80	3.5
RHONE POULENC	CHEMICALS	43	2.9
THOMSON-CSF	ELECTRONICS	59	2.8
ITALY			
ENEL	UTILITY	100	7.7
ENI	OIL	100	5.6
AGIP	OIL	100	5.0
STET	TELECOM	52	4.1
BCI	BANKING	57	2.2
FINMECANICA	ENGINEERING	100	1.7
SME	FOOD	69	1.3
SPAIN			
ENDESA	UTILITY	76	7.1
ENCE	FOREST PRODUCTS	55	3.3
REPSOL	OIL	41	3.2
TELEFONICA	TELECOM	32	3.1
GERMANY			
DEUTSCHE TELEKOM	TELECOM	100	22.1
LUFTHANSA	AIRLINE	55	1.2
BRITAIN			
BT	TELECOM	22	8.6
NATIONAL POWER	UTILITY	40	2.7
SWEDEN			
NORDBANKEN	BANKING	100	2.5
TELEVERKET	TELECOM	100	2.1

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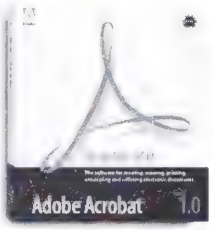

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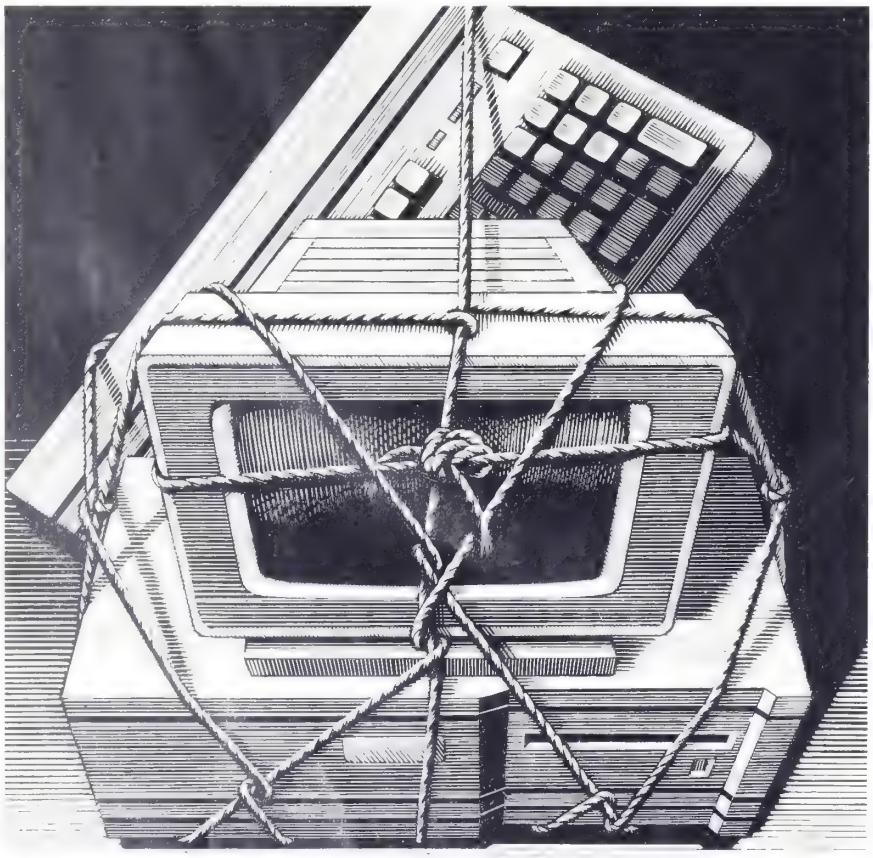

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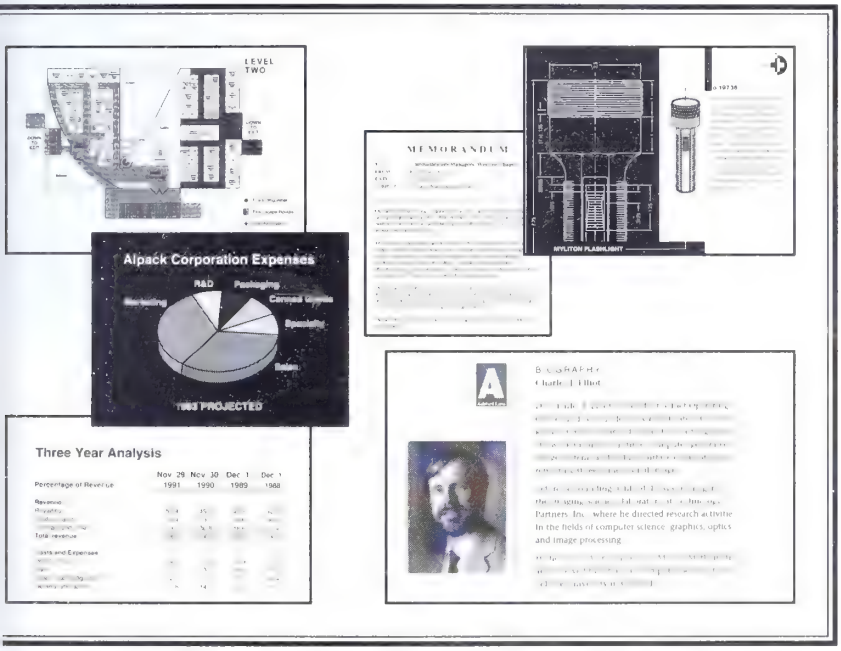

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WITH INFLATIO RUNNING AS HI AS 30% IN SOME URBAN AREAS, MANY ARE TAK ING ADVANTAG OF THE EASY-MONEY CLIMAT TO MAKE BIG PROFITS IN REAL ESTATE SPECULATION

BEIJING STARTS PUMPING THE BRAKES

Vice-Premier Zhu takes charge of a plan to slow the economy and rein in the banking system

For months, Chinese officials have watched nervously as the nation's financial institutions edged toward a crisis. Banks have been short on cash as depositors shunned accounts that paid interest at a fraction of the 20% urban inflation rate. Still, Deng Xiaoping called for speedy economic growth, which encouraged banks to issue more loans. So financial institutions devised elaborate schemes to avoid paying out cash they owed. They have swamped workers and peasants with a rainbow of different promissory notes, colored red, gold, green, and white. Anger over IOUs led to peasant riots early this summer. Now, to avoid a new flurry of the controversial IOUs, Beijing has finally decided to clamp down on the free-wheeling banks.

Vice-Premier Zhu Rongji, a leading reformer, has the difficult job of cooling the overheated economy and restoring confidence in the financial system. Already one of the most powerful politicians in China, he recently added to his portfolio by taking charge at the central bank. Zhu has a further incentive in managing a soft landing for the economy: If he pulls it off, he will have gone a long way toward pushing aside his rivals in the looming struggle to succeed the ailing Deng.

TAILSPIN. Zhu, 64, isn't wasting any time. In late June, he engineered the ouster of Li Guixian, central bank governor and an ally of Zhu's more conservative rival, Premier Li Peng. Zhu then proposed a wide-ranging program to regain control of the banking system (table). The plan, which was leaked to the Hong Kong press, calls for raising interest rates, imposing a 20% cut in government operating expenses, forcing workers to buy government bonds, and recalling speculative loans used in the property and stock markets.

These measures and others are designed to slow the growth rate from the 14% of the first five months of 1993 to a more manageable, but still robust, 10%. Above all, Zhu wants to avoid the mistakes made in past efforts to stop runaway growth. In the late 1980s, Li Peng's crackdown on bank lending sent the economy into a tailspin, led to panic buying, and ultimately contributed to the democracy protests of 1989. "Zhu is trying to rein in the banking system as opposed to slamming on the brakes," says a Western businessman in Beijing.

But the challenge is even tougher ow. Indeed, some analysts question hether anyone can quickly get a grip n the country's banks. Rapid decentralation of the economy has left many anks to maneuver on their own. While entral authorities are supposed to keep abs on the various bank branches to nsure they don't exceed lending quotas, any provincial officials ignore the dirctives. That has resulted in a liquidity risis. "Banks are responsible for conolling the money supply, but it's the anks themselves that have been exanding the demand for money," says ai Yuanchen, a senior researcher at eijing's Institute of Economics.

Banks are not the only ones thumbing heir noses at Beijing officials. The insaable demand for capital also has given se to a booming money-lending busiess, much of it illegal. Dai says Chinese anks routinely loan money to "illicit fiancial institutions." These groups then peculate in stocks and real estate. Oth- r experts say the unofficial money maret is just as large as the official one, aking it more difficult for Zhu to gain ontrol over the money supply. Western conomists in Beijing estimate that this ear some $35 billion has been raised utside the official banking system.

To compound Zhu's problems, the central bank, the People's Bank of China, is in no position to fine-tune the economy simply by adjusting interest rates. As in the old command-economy days, it simply allocates funds and prints money as it sees fit. Some 30% of the lending by China's four giant specialized banks went to propping up unprofitable state enterprises, which would sink deeper into the hole if banks raised interest rates. To modernize the monetary system, Beijing first needs to restructure its ailing state sector—a cumbersome process that could take years.

Attracting savings back into the system will also be an uphill battle. As much as $200 billion may be under mattresses across China. Many Chinese depositors prefer to buy gold, foreign exchange, or stocks. People are also avoiding central government bonds, whose rates of around 12% are about half the inflation rate. "Confidence in the government as a financial institution is at an all-time low," says a Smith New Court Securities Ltd. report.

Zhu's immediate task is to restore faith in the banking system by disciplining the wayward provinces. And the ouster of Li Guixian, who was said to be lenient toward delinquent banks, is a strong indication that Zhu means business. "It was a powerful signal to the provinces," says a Western banker in Beijing. "It said: 'O. K., if you don't listen, you're out.' "

If nothing else, Zhu is putting errant bank officials on notice—and reducing the chances that they will make risky loans in the future. Some of the cash used by illegal financial institutions is also expected to dry up once the banks become more rigorous in issuing new loans. Bank lending rates are expected to move gradually higher—climbing about 3 percentage points, to around 12% this month, with more increases to follow. Hong Kong analysts say these moves could go a long way toward resolving the liquidity crisis. "The measures Zhu is taking are absolutely in the right direction," says Andrew Freris, chief regional economist for Salomon Brothers Hong Kong Ltd.

MURKY COURSE. Already, Zhu has restored some confidence. China's currency, the renminbi, had plunged over 30% at semiofficial currency centers last month, hitting a low of 10.92 to the U. S. dollar. But with Zhu now in charge of the central bank, it has surged, closing at 8.4 on July 7. And foreign investment continues at a record pace.

As Zhu tightens the rules, he will be making powerful enemies. Many of those profiting from the easy-money climate are sons and daughters of high-ranking party veterans and are making a killing in property speculation in the coastal provinces. "This is obviously a highly risky game for him," says a Western diplomat in Hong Kong. The betting is that Zhu will manage to gain control of the banking system. But he'll need quick results in order to keep his rivals at bay.

By Joyce Barnathan in Hong Kong, with Matt Forney in Beijing

ZHU RONGJI'S SOFT-LANDING STRATEGY

- Raise interest rates from about 9% to 12%
- Curb bank lending for speculative investments
- Ban car imports for the second half of 1993
- Reduce government operating expenses by 20%
- Slow down decontrol of prices
- Scale back infrastructure spending
- Bestow new powers on central bank

DATA: WEN WEI PO NEWSPAPER, BUSINESS WEEK

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SO YOU THOUGHT JAPAN'S LDP WAS DONE FOR

Japan is heading into what could be its most important elections since the Liberal Democratic Party began its uninterrupted reign 38 years ago. But as the campaign or the July 18 Lower House contest swings into high gear, it's ooking as if Japanese and foreign pundits' predictions of the DP's demise may turn out to be premature. If so, President ill Clinton may wind up regretting that he embarrassed the DP by courting opposition leaders during his Japan trip.

Cooler heads are talking about a more probable scenario: he LDP would win enough seats to be able to form a coalion. To be sure, such a scenario would still represent a sigificant change. A coalition government ould be the first for Japan since the arly 1950s, and the country might then ove much closer to a real two-party stem.

But the LDP may retain a much bigger ole than might be expected after Prime inister Kiichi Miyazawa's fall in a noonfidence vote and the emergence of ree new opposition parties. Look at e numbers. Although Japan's political oothsayers warn that the vote is still xtremely tough to call, a consensus of redictions by six leading Japanese politeal analysts has the LDP winning 211 eats, down from the majority of 275 it eld until June 18. These forecasts also show the Buddhistacked, conservative Komeito, or Clean Government Party, inning 50 seats. If the two parties did join forces, they ould have 261 seats—five more than a majority of the 511eat Lower House.

EFORM PROMISES. Alternatively, the LDP might also team up ith the consolidated Japan New Party/Pioneer New Party, ow forecast to win about 50 seats, or the LDP-breakaway enaissance Party, also good for about 50 seats. It would be r easier to forge this sort of coalition than for the disparate pposition parties to coalesce into a new government. For one thing, there is bad feeling between the Renaissance power brokers, Ichiro Ozawa and Tsutomu Hata, and the Japan New Party head, Morihiro Hosokawa, whose idealistic crowd scorns the Renaissance chiefs as political hacks. For their part, Ozawa and Hata doubt that Hosokawa's group has the experience needed to govern.

To cut a deal with any of these potential partners, the LDP would have to promise to refashion in short order Japan's corruption-inducing and disproportionate electoral system, which favors rural over urban voters. The LDP might also have to give up a couple of Cabinet seats and shunt aside most, if not all, of its discredited elder leaders. This, say analysts, could lead to the return of popular but politically weak Toshiki Kaifu to the premiership, with the powerful and even more popular Ryutaro Hashimoto, a former Finance Minister, taking the key post of LDP Secretary-General.

KAIFU: NEW POWER FOR THE EX-PREMIER?

SOCIALIST DEBACLE? Assuming that electoral redistricting occurs rapidly, new elections would come in mid-1994. An image-enhanced and relatively rich LDP could then regain a majority in the Lower House. "The LDP could wind up in an even stronger position because it had survived its biggest challenge ever," says a former LDP staffer.

In fact, the traditional opposition Japan Socialist Party may lose as many votes as the LDP to the upstarts. Such a humiliation for the Socialists could lead to the party's breakup after the vote, many observers predict. A collapse of the Socialists would allow the new opposition parties to coalesce with other non-LDP conservatives into a more effective opposition than the Socialists have been for decades. In fact, whether they can put aside their rivalries and cooperate is the biggest question mark now hanging over the LDP's long-term future.

By Robert Neff in Tokyo

GLOBAL WRAPUP

EC HEADQUARTERS GAMES

The European Community has a "homeless" problem. About a dozen planned agencies have no home. Even the EC's embryonic central bank, the European Monetary Institute, set to open on Jan. 1 if the Maastricht Treaty s ratified, is up for grabs. A majority favors Frankfurt for the EMI, but Britain, worried that Frankfurt might eclipse London as a financial center, s blocking needed unanimity. The EMI nay wind up in Bonn. Political bickering about which EC member is to get what headquarters plum is also blocking the startup of operations for the EC's environmental agency, its trademark unit, its food and drug agency, and several smaller units. Some homeless agencies have set up skeletal staffs that work out of cardboard boxes and travel around the EC like gypsies.

VIETNAM IMBROGLIO

President Clinton's green light on World Bank and International Monetary Fund loans to Vietnam has only brought increased pressure from U. S. executives to scrap the 18-year-old American trade embargo against that country. They fear that Japanese and other non-U. S. companies will rush in to grab contracts generated by the new bucks. Meanwhile, U. S. business remains shut out of a potential gold mine. The Administration is now hinting that Clinton will lift the embargo by mid-September.

LIRA FALLS, VATICAN SMILES

The 30% fall in the lira has been a huge boon for the Vatican. That's because most of its expenses are incurred in lire, while most receipts come in dollars and German marks from wealthy Catholic communities in the U. S. and Germany. Last year, the Holy See's budget deficit was only $3.4 million, compared with $87.5 million the year before. It has also brought in Nomura Securities Inc. and Merrill Lynch & Co., among others, to sharpen up portfolio management.

AP WIDE WORLD

REGULATORS

A GENTLE PERSUADER FOR THE SEC

Arthur Levitt will sharply contrast with his autocratic predecessor

Arthur Levitt Jr. craves adventure. On July 6, he and some companions set out to climb Colorado's 13,800-ft. Mt. Powell. It was his 18th excursion with the wilderness group Outward Bound, including a horseback journey through the canyons of southern Utah and a raft trip down the Yampa River in Colorado. The 62-year-old former chairman of the American Stock Exchange "is the type of person who is comfortable with a certain amount of danger, especially if it is controlled and designed to test one's limits," says William S. Reed, a Wellesley College vice-president and frequent wilderness companion.

The terrain at the Securities & Exchange Commission may prove just as rugged. Levitt plans to cut short his Colorado sojourn to attend July 13 Senate confirmation hearings on his appointment as the SEC's 25th chairman. If, as expected, the Senate approves, he will face a slew of contentious issues. Stock exchanges are demanding that competitors be barred from paying brokers for moving their trades off the exchange floors. And Congress is calling for greater oversight of the municipal bond market. The SEC is also expected to study derivatives, which are proliferating wildly at what critics worry may be the peril of everyone from bank traders to small investors. "A lot of people will have knives sharpened for the chairman," says House Energy & Commerce Committee Chairman John D. Dingell (D-Mich.), a longtime Levitt friend.

How the SEC responds could alter the nation's capital markets. Consider paying for stock orders, which pits the New York Stock Exchange against the rival over-the-counter market and new proprietary computerized trading systems. The Big Board's share of trades has shrunk from 85% to 65% since 1980, and it places some of the blame on payments rivals make to attract orders. At a recent congressional hearing, Representative Edward J. Markey (D-Mass.), chairman of the House Energy & Commerce finance subcommittee, said some critics consider the off-exchange inducements tantamount to "commercial bribery."

THE TOP PRIORITIES: PROTECT INVESTORS AND HELP ENTREPRENEURS

LEVITT'S TOUGHEST DECISIONS

- Whether to stop OTC market makers and computerized trading systems from paying brokers to divert trades away from exchange floors. A House subcommittee is investigating alleged disclosure and pricing abuses.
- Whether to impose tighter regulations on derivative instruments such as collateralized mortgage obligations and interest-rate swaps. These products can involve big risks.
- Whether to require more disclosure from issuers of municipal bonds that trade on the secondary market. The SEC is investigating linkages between big bond houses' political contributions and underwriting contracts.
- Whether to loosen reporting requirements to allow foreign companies to trade their securities on U.S. exchanges.
- Whether to cut the regulatory burden on small companies.

The commission is expected to ad dress the issue in an extensive staf study called *Market 2000*, due out b yearend. But given his Amex back ground, Levitt will have to tread careful ly. Speaking in March to the Securitie Industry Assn. (SIA), he expressed con cern about the payments. If the SE curbs order-flow arrangements or other wise seems to favor established exchang es, some industry players will grous about Levitt's objectivity.

TWOFOLD MISSION. In fact, when hi name was first floated as Clinton's SE choice, NASDAQ President Joseph R. Har diman publicly questioned if Levitt coul be unbiased. Most of Levitt's career ha been tied to the auction market. In th 1960s, he labored in the brokerage busi ness, rising to president of what becam Shearson Lehman Brothers. In 1977, h began a 12-year stint as Amex chair man, becoming part of the Wall Stree Establishment.

Levitt declined to comment for thi story. But he has convinced SEC insider that he knows his new rol will require him to be a objective arbiter. Says Act ing SEC Chairman Mary L Schapiro: "Arthur won' have a problem separatin his career at the Ame from his role as chairma of the SEC."

Levitt believes he has twofold mission: protectin investors and promotin the interests of entrepren eurs—a Clinton hot buttor A particular concern to in vestors, he told the SIA, i increasing risk from com plicated derivative invest ments, such as collatera ized mortgage obligation and interest-rate swaps These instruments are o ten used by institutions t hedge their risk but ma be inappropriate for sma investors.

Levitt also has ex pressed alarm about po sible abuses in the boon ing municipal bond marke According to Commissione Richard Y. Roberts, th SEC nominee is troubled b the linkage between th big bond houses' hefty p litical contributions an underwriting mandate But politicians, cities, an states are sure to fig stiffer regulation.

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Buckle up, America!

capital has long been a concern of Levitt's and led him in 1981 to set up American Business Conference Inc., a lobbying group for small and midsize companies. Look for the SEC to create a blue-ribbon panel, a favorite Levitt tactic, to study how to cut regulatory burdens on small companies.

Levitt has firsthand knowledge about startups. After leaving the Amex in 1989, he launched a publishing concern whose biggest asset is a majority interest in *Roll Call*, a twice-weekly paper that covers Capitol Hill. Senate Banking Committee Chairman Donald W. Riegle (D-Mich.) says it poses a conflict of interest and has asked Levitt to divest ownership. Sources say Levitt plans to sell his 60% interest, probably to the paper's minority owner, *The Economist*, after his confirmation.

The newspaper ownership isn't the only pitfall Levitt may face on Capitol Hill. Dingell's first choice for the SEC post was one of his top aides, Consuela Washington. Dingell has been known to give the commission's chairmen migraines with far less provocation—and Washington will be the committee's staff expert on securities. "I'm not going to cry over spilt milk," Dingell says. "But Arthur won't get a free ride just because he's a friend."

As the head of the commission, Levitt would provide a sharp change in management technique from the autocratic style of his predecessor, Republican Richard C. Breeden. Levitt uses a brand of gentle persuasion learned at the elbow of his father, a longtime New York State Controller.

ARTFUL COMPROMISE. His penchant for conciliation was the reason that Levitt was tapped in 1987 to defuse one of New York City's prickliest issues: what to do with the dilapidated West Side Highway. While business dreamed of an economic bonanza from rebuilding the Hudson River route, environmentalists conjured up a nightmare of urban congestion. As head of a task force, Levitt worked behind the scenes for months to craft an artful compromise that has served as a blueprint for the ongoing West Side redevelopment project. "He's a master consensus-builder," says Roberta Brandes Gratz, an urban-design critic and task-force member.

Since his nomination on Apr. 29, Levitt has been working out of a spartan office at SEC headquarters, spending a lot of time popping in on staffers and top officials. "He is intelligent, interested, creative, and collegial," says Schapiro, emphasizing the contrast with Breeden's imperial ways. Levitt will need all of those qualities—and then some—if he is to hike the tricky terrain ahead without stumbling.

By Michael Schroeder in Washington

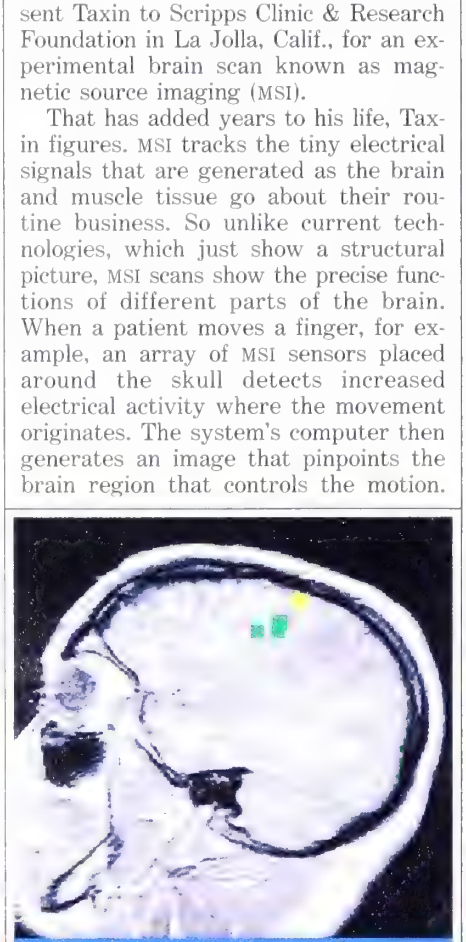
MEDICINE

WATCHING THE BRAIN AT WORK

MSI scanning provides ultraprecise close-ups

For Albert Taxin, the first hint of trouble came one steamy day last July. The 52-year-old owner of Philadelphia's venerable Bookbinder's restaurant collapsed while jogging. His physician wrote it off as heat stroke, but then it happened again, and again. Finally, neurosurgeons found a malignant brain tumor—and the nightmare began. Doctor after doctor refused to operate, fearing that surgery would leave Taxin an invalid. The tumor had displaced the motor cortex, the part of the brain that controls movement, and the doctors were unsure of its exact location. Eventually, one neurosurgeon sent Taxin to Scripps Clinic & Research Foundation in La Jolla, Calif., for an experimental brain scan known as magnetic source imaging (MSI).

That has added years to his life, Taxin figures. MSI tracks the tiny electrical signals that are generated as the brain and muscle tissue go about their routine business. So unlike current technologies, which just show a structural picture, MSI scans show the precise functions of different parts of the brain. When a patient moves a finger, for example, an array of MSI sensors placed around the skull detects increased electrical activity where the movement originates. The system's computer then generates an image that pinpoints the brain region that controls the motion.



TRACKING SIGNALS: THE FUNCTIONAL AREAS, HIGHLIGHTED IN GREEN AND YELLOW, TELL SURGEONS TO STEER CLEAR

Seeing the exact location of the tumor and the function of adjacent tissues enabled Taxin's neurosurgeon to proceed. "When I showed him the pictures," Taxin recalls, "he said: 'Let's go out and celebrate—I can operate.'"

Doctors from more than a score of medical centers in the U. S. are referring patients to the two facilities that now offer MSI, Scripps and the Veterans Administration hospital in Albuquerque. Today, MSI is used mainly to map the brain before surgery. But researchers believe it will also help them understand brain activity affecting everything from epilepsy and Parkinson's disease to psychiatric disorders. "This will revolutionize psychiatry and behavioral neurology," says Dr. Christopher C. Gallen, a psychiatrist and neurologist at Scripps. Adds Dr. Rodolfo Llinas, chairman of the physiology and biophysics department at New York University Medical Center: "I can imagine the day when people will come in once a year to see how their brain is doing, just like they go to the dentist to get their teeth checked."

FINE-TUNING. The prospect of a new, multibillion-dollar medical-imaging market has business excited, too—though sales won't take off until insurers start paying for the treatment. So far, Biomagnetic Technologies Inc., a tiny San Diego company that is collaborating with medical centers in the U. S., Japan, and Europe, is the only company that has Food & Drug Administration approval for its scanner—a $2.5 million system. But the major medical-imaging companies all have similar programs underway. Siemens has installed three systems in Europe, and Philips and General Electric are developing prototypes of their own. Startups in Canada, Italy and Finland are fine-tuning the technology. And the Japanese government and 16 companies, including Hitachi, Toshiba and Shimadzu, have a $50 million consortium to build a prototype of a more sophisticated scanner by 1996.

MSI takes advantage of the fact that every electrical signal creates a magnetic field around it. In the body, the difficulty is that such magnetic fields are infinitesimally small—a billionth of the

arth's gravitational pull in the case of ne brain. "It's like listening for the footteps of an ant in the middle of a rock oncert," says Scripps's Gallen.

By the mid-1970s, scientists had hown that sensitive instruments called nagnetometers could pick up magnetic elds from the heart and brain. At the ame time, the government was designg ultrasensitive magnetometers for nonitoring underground nuclear explois and finding enemy submarines. 'he instruments do so using a low-temerature superconducting wire coil—nown as a superconducting quantum nterference device, or SQUID.

The idea of using the technology n medicine got a boost in 1982, hen University of California t Los Angeles researchers id the first experiments n which a biomagnetomer precisely located the aulty brain tissue that riggers epileptic seiures. Other external nethods of monitorng the body's lectrical activity—uch as electroenephalographs—canot determine the xact location beause electrical sigals are distorted as ney pass through one and tissue.

To zero in on the nagnetic fields, which ren't distorted as they ass through the body, TI's biomagnetometer is ressed against part of the kull for a few seconds. Sensors n the instrument—which looks like n X-ray machine—collect data rom 37 points. Then the patient's ead is moved slightly and the proess is repeated. A complete scan akes nearly an hour and requires a oom shielded against stray electrial signals. The computer-generated imge is overlaid on a conventional magetic resonance imaging (MRI) scan. This omposite shows both tumors and other ructures—from the MRI—plus the sensoy and motor functions.

ISURERS UNSURE. Despite such wizdry, MSI must win over insurers and edicare before it will become commonlace. "MSI scanners are giving us inforation that wasn't available before, so 's difficult to put a dollar value on it," ays Dr. Thomas A. Waltz, Scripps's resident and a neurosurgeon himself. t probably adds to costs, but it should lso] significantly add to the success of rgeries." The one-hour scan costs 1,200, roughly the same as an MRI. Durg development, BTI has underwritten the scans' cost. But now, Scripps has started billing patients for the service in an attempt to persuade insurance companies to begin reimbursing patients on a case-by-case basis. "I'm optimistic," says Gerald Cohen, manager of applications development for GE Medical Systems in New Berlin, Wis., "but reimbursement agencies keep raising the bar" for new technologies.

Some doctors believe insurers will relent, sooner or later. The MSI procedure "has eliminated to a large extent some of the devastating consequences of neurosurgery," says Dr. William W. Orrison Jr., chief of neuroradiology at the University of New Mexico and Veterans Administration hospitals in Albuquerque. "It doesn't take many unintentional paralyses to pay for this."

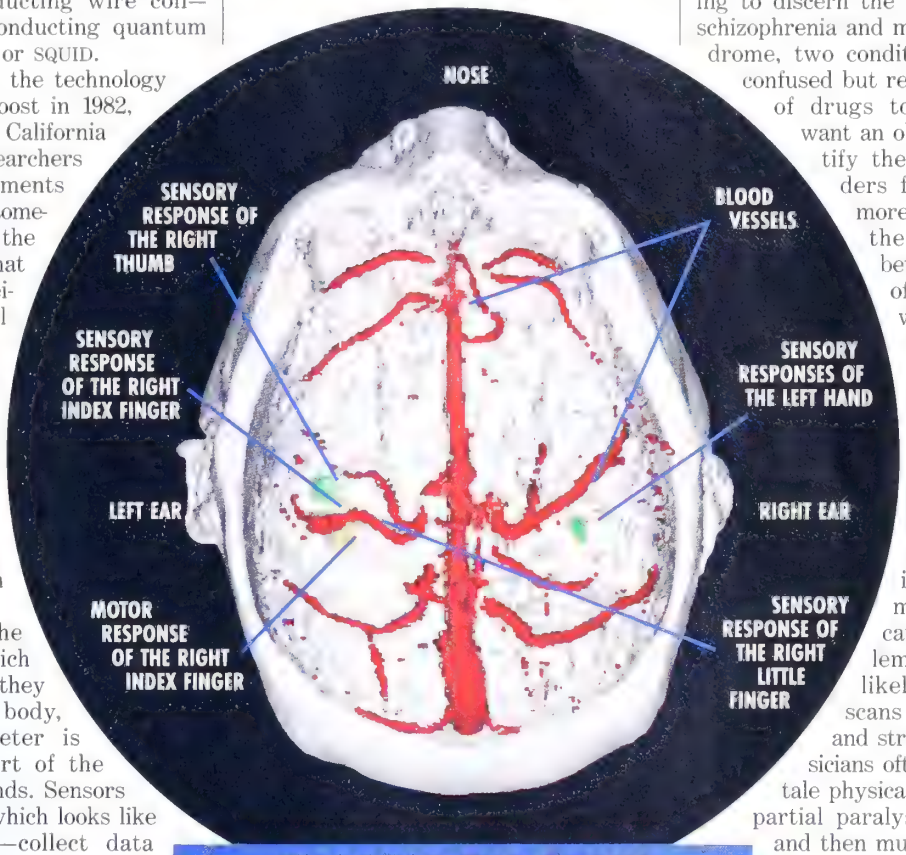
Better yet, researchers are on the verge of proving MSI's ability to pinpoint the brain's language center, another area that surgeons want to skirt. And they are close to demonstrating its value in epilepsy surgery. About a quarter of epileptics can be helped by removal of the tissue that triggers their attacks, but very few operations are done today. The actual surgery averages $7,000, but the week or more of monitoring with electrodes implanted in the brain to find the origin of the epilepsy can easily top $40,000. That cost could be eliminated using an MSI scan, says Scripps's Galen.

Scientists are also using MSI to try to figure out the pattern of brain signals that indicate dyslexia or attention disorders in children. Today, it's difficult for a psychiatrist to know whether such biological problems are at the root of some childhood troubles—or whether those are caused by social situations such as drug or child abuse. Researchers are also trying to discern the differences between schizophrenia and manic-depressive syndrome, two conditions that are often confused but require a different set of drugs to treat. Physicians want an objective way to identify these and other disorders for two reasons: to more accurately diagnose the condition and to better gauge the effect of treatments. "What we want to know is whether brain function is improving," says Orrison. "Now, about all we can do is ask, 'Do you feel better?' "

Long before MSI is commonplace in psychiatry, however, it will be solving the mysteries of brain-caused physical problems. The next use is likely to be diagnostic scans after head injuries and strokes. Currently, physicians often must rely on telltale physical symptoms—such as partial paralysis after a stroke—and then must wait several days or more to see whether patients improve. Because it monitors electrical activity, MSI will be able to tell immediately whether brain tissue is working or not.

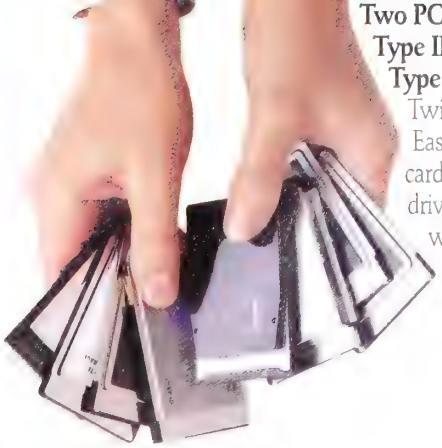
Orrison knows that firsthand. In a basketball game with his 9-year-old son last year, the Albuquerque radiologist ran into a wall. The mishap gave him a terrible headache, made his eyes overly sensitive to light, and kept him from sleeping. At work the next day, he scanned himself. The MRI was completely normal—there was no structural damage. But the MSI scan showed dramatic changes—a slowing of the electrical activity—exactly where he had hit his head. "It made a real believer out of me," he says. A day later, a second MSI scan showed no brain dysfunction. And all of Orrison's symptoms were gone.

By Larry Armstrong in La Jolla, Calif., with Jonathan B. Levine in Paris and Neil Gross in Tokyo



MAPPING THE BRAIN

Magnetic Source Imaging enables doctors to see the function of brain tissue as well as its structure



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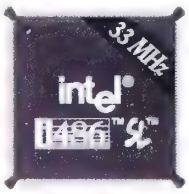

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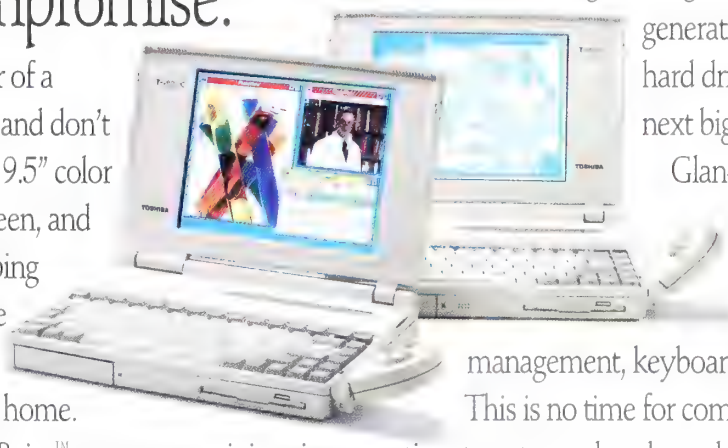

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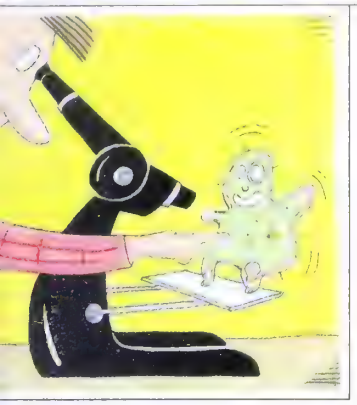
TED BY EMILY T. SMITH

ICROSCOPES WITH SUPERCOMPUTER OWER COULD WATCH LIVING CELLS



When doctors check the health of an organ—the heart, say—they use imaging devices, such as PET or MRI scans. But when researchers want to watch cells function, they take pictures through microscopes that then take hours or days to process.

Scientists at Carnegie Mellon University's Center for Light Microscope Imaging & Biotechnolo- intend to create a device that will let scientists watch ls in real time—and in three dimensions. Under a grant m the National Science Foundation, the researchers plan to uple a microscope with a workstation that can display 3-D ages of cells. They would then link this device to a super- nputer that would supply the power to process the images real time. The researchers hope to have a prototype in ee years. The advanced tool could help biologists under- nd how cells and tissues function and aid drug and biotech npanies in determining the molecular effects of drugs.

S. ELECTRONICS MAKERS MISS OME DIGITAL VCR SIGNALS

When U. S. engineers built the first prototypes for digital high-definition TV in the late 1980s, they stole Japan's nder. The machines, resembling powerful graphics comput- s, drew on U. S. strengths in chips and software. Optimists sed that the breakthrough could spark a renaissance in nerican consumer electronics. But skeptics argued that few S. manufacturers would ever get back in the low-margin siness of building TV sets and related consumer gear.

So far, the skeptics have been right. Last week, 10 of the rld's largest electronics companies—including Matsushita ctric Industrial, Sony, Philips Electronics, and Thomson—un- led a preliminary standard for next-generation digital VCRs. like current audio and video recording devices, these will ke perfect copies from ordinary TV signals once they reach res in about 1997. And they will record in any high-defini- n format, even the digital one proposed for the U. S. But t a single U. S. company appears on the list. Unless some cide to belatedly join the group, the future of consumer elec- nics will continue to be charted in Japan and Europe.

'LIVING WILL' NETWORK HELPS HE DYING TO SPEAK FOR THEMSELVES

Nothing can be more wrenching than making treatment de- cisions for an incapacitated patient, especially if there is uestion about what the patient wants. "Living wills," which ecify a patient's wishes in such circumstances, can eliminate ne of the confusion.

To help patients speak for themselves, Richard Buford, esident of the Cleveland-based National Electronic Archive Advance Directives (NEAAD), has created the PrepCard. Using the Social Security and personal ID numbers on this credit-card-size gadget, doctors and family members can get instant access to the patient's living will anywhere in the U. S. at any hour from a touch-tone phone. Within minutes, a copy of the cardholder's wishes can be faxed from the NEAAD computer to a relative, friend, or caregiver. NEAAD sells the card to companies for $10 per employee, plus a $22 annual fee to store the document. PrepCards must be renewed each year to affirm the living will. By later this year, the cards will be able to store health information as well.

THIS CHIP TAKES THE PAIN OUT OF GEARING UP FOR GRAPHICS

The emphasis on snazzy graphics for personal computers has highlighted a glaring weakness: PCs are laggards when it comes to handling pictures—especially moving pictures, such as those on TV. That soon may change. And bringing TV to your PC may not cost anywhere near the $600 and up that multimedia mavens now shell out for full-motion video circuit boards for PCs. In some cases it will hardly cost anything, says James A. Bixby, chairman of Brooktree Corp. The San Diego company specializes in video chips that in the blink of an eye convert analog images into digital data.

Brooktree's latest design shrinks the capabilities of a plug-in video board onto one $42 chip. Since this chip can replace one that all PCs already have, making PCs ready for TV will be essentially free, says Bixby—at least for new computers with motherboards that include the Brooktree chip. Couple it to the fast new $55 graphics chip from Oak Technology Inc., which does the work of a graphics accelerator board, and the result will be a video workstation that displays TV and zips through Microsoft Corp.'s Windows and other graphics-heavy programs. For existing PCs, Bixby adds, Brooktree's chip will slash the price of full-motion video boards to less than $300.

A POT OF PURE CHEMICALS AT THE END OF THE RAINBOW

Measurements of the properties of liquids are vital if you're in chemicals, oil, brewing, food, or pharmaceuticals. They help ferret out quality problems—incorrectly formulated chemicals or cloudy beer, for instance. Trouble is, each characteristic must be measured separately.

Norman McMillan, a physicist at the Regional Technical College in Carlow, Ireland, says he can now measure multiple properties of a liquid in one step using just one drop, by exploiting the phenomenon that produces rainbows. In his system, liquid passes down a tiny tube, slowly forming a drop at the end. Light shining through an optical fiber into one side of the drop reflects off the surface to a fiber on the opposite side. As the drop grows, the path taken by the light changes and leaves a trace. An analyzer plots the traces of light-intensity variation against time as the drop forms—and measures properties from them. McMillan can thus determine the viscosity, refractive index, surface tension, and color of liquids. He is trying to interest scientific instrument makers in the technique.

M. E. COHEN

SALESMEN

THE MAN WHO'S SELLING JAPAN ON JEEPS

Mitsuru Sato has Chrysler's off-roaders on a rapid climb

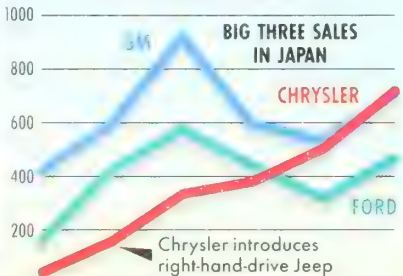
Mitsuru Sato is nothing if not resourceful. At age 23, hitchhiking across Europe, he often persuaded farmers to give him room and board if he cleaned their pigsties and fed their chickens. When his wallet was stolen in Rome, he cashed in his return ticket to Japan, figuring he could travel home more cheaply overland. Even spending just $2 a day, he ran out of money, forcing him to beg his way across the Middle East. In Baghdad, a horrified Japanese businessman once ponied up $70. But Sato almost didn't make it out of Libya, where he was arrested and grilled by the police.

Now 50, Sato flies business class and draws a hefty salary from Honda Motor Co. But his powers of persuasion are still his greatest asset. Since 1991, he has managed Honda's tie-up with Chrysler Corp. to peddle four-wheel-drive Jeep models in Japan. After a rocky start, sales are booming. Although Sato projected he could unload 1,000 Jeep Cherokees in 1993, he hit 1,389 after just six months. That has energized Chrysler's overall sales. Suddenly, it rivals General Motors Corp. as the U. S. carmaker with the most Japanese sales (chart).

While selling American cars in Japan isn't as bad as cleaning pigsties, it comes close. Overall, Detroit's Big Three hawked just 14,093 vehicles there last year. Japanese consumers are wary of most U. S. models, citing shabby workmanship and dismal reliability. And until recently, Detroit has done little to respond. Even after 1989, when Tokyo altered its tax system to stop penalizing large cars, Chrysler, GM, and Ford Motor Co. shipped existing models—left-hand drive and all. True, Honda needed a four-wheel-drive vehicle to round out its lineup. But its relationship with Chrysler began as a marriage of political convenience—a gesture to ease trade tensions.

Clearly, the four-wheel-drive craze sweeping Japan has helped Jeep's surge enormously. Since 1991, Japanese buyers have been snapping up off-road vehicles made by Mitsubishi, Nissan, and Toyota, although most of them never leave the pavement. (City folks even splatter mud on their rigs to make them look used.) The Cherokee enjoys name recognition among young fans of things American, whereas Ford's newer Explorer is not selling as well. With Honda's sales slumping lately, dealer Hisao Ohno says: "We're counting on the Cherokee to bring people into the showroom."

CHRYSLER'S HOT SALES STREAK IN JAPAN



▲ MONTHLY UNIT SALES
DATA: JAPAN AUTOMOBILE IMPORTERS' ASSN

NOT SHY. Credit Sato, though, with making Jeeps salable enough to take advantage of the four-wheel-drive phenomenon. Through a combination of slick salesmanship and straight talk, he has broken down the barriers that existed initially between Chrysler and Honda. Ironically, confrontation was the key. Chrysler International Vice-President Jon Holcomb explains that Sato tells his U. S. counterparts exactly what he thinks is wrong with Jeeps shipped to Japan. He's no less shy in meetings with Chrysler Chairman Robert J. Eaton. That allows Chrysler to push its own demands just as forcefully. "Sometimes our conversations are very heated and very blunt," says Holcomb. "When [Sato] is that candid, he opens the door for you to be that candid back."

Sato's complaints run mostly to workmanship, while Chrysler grouses that Japanese dealers have discriminated unduly against U. S. vehicles. Sato has strong-armed Chrysler to improve quality, pricing, and parts support. But he also had to convince dealers that improved Jeeps would sell.

To woo dealers, Sato initially set up a predelivery inspection at Honda's own lab, paying the extra $1,200 per car out of his own budget. He organized parts depots and service centers, and talked Chrysler into a Japan-style warranty of three years instead of one. Chrysler, meantime, demanded that Jeeps sell through all Honda dealerships, not just the budget-car dealers Honda originally proposed. "He was clearly fighting a lot of battles internally," Holcomb says.

Chrysler, though, was his main sparring partner. "If they don't do what I want, it's my fault for not convincing them," he says. Sato hounded the automaker over quality, often meeting with technical people and sending engineers over to the Jeep factory in Toledo. He ditched the dense user's manual after his wife, Yasue, tried to figure out how to make the seat recline and gave up in disgust. When Chrysler wouldn't help, he spent $96,000 redesigning the manuals in Japanese style—with big diagrams

nd cartoons. Chrysler later paid up. For all that trouble, Sato won his two ost important battles with Detroit. In ebruary, after months of prodding, hrysler offered a right-hand-drive ver-on of the Jeep Cherokee and slashed e price 28%, to about $35,000. Japan-ound Jeeps also now get a special qual-y check in Toledo, and changes have een made in production. The under-ood wiring, for instance, has been rear-nged to help meet Japanese standards. The result is an order backlog of early 1,000 units. Sato thinks sales ight hit 2,600 this year. Inspectors and rvice engineers are struggling to keep ace. "He's almost too good at beating s targets," says Honda President Nob-iko Kawamoto. Honda must sell 3,000 eps annually to break even. It hopes hit that target next year.

OT RELIGION. Sato isn't shy when it mes to self-promotion. A born talker, likes regaling listeners with his ex-oits. In 1979, he recalls, after a stint eddling Honda motorcycles in Brazil, was put in charge of selling power enerators in the Middle East and India. lthough the Indian government re-ricted direct imports of the machines, ato found a loophole: Domestic com-anies could bring in goods matching e value of those exported. Sato mailed 0 letters to Indian export companies, fering to team up. Orders began to aterialize. When government officials nally clamped down, he switched to aders in Nepal who advertised near e Indian border, luring Indian consu-ers to take generators back them-lves. All in all, sales jumped from ,000 units to 120,000 in three years.

His performance as president of lack-ster Honda in Thailand was similar: om 1985 to 1990, sales surged thir-enfold, to 10,470 units annually. Market are catapulted from 2% to 22%. Lifting rysler to a significant share in Japan, wever, will be a different story. rysler seems to have found religion: is adding more models to its Japan eup and plans to introduce a diesel gine. But Sato insists the Cherokee still about $6,600 overpriced. And he uld like to see a right-hand version of e newer Grand Cherokee. Chrysler ys the investment isn't justified yet.

Sato, who bicycles on weekends—en he isn't with his wife and two chil-en—will need to stay in shape to keep ttling Chrysler. Too many decisions, complains, are still handed down from etroit. "My mission now is to see how any Chrysler people can really under-and the Japanese market," he says. etty smug for a smooth-talking car lesman. But if he keeps up the pace, rysler is bound to keep listening.

By Karen Lowry Miller in Tokyo, with wid Woodruff in Detroit

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As the nation's premier business school, Harvard, through the executives it trains and the theories and practices it propounds, should be management's seismograph, helping U. S. corporations track, understand, and prepare for the global earthquakes that are transforming our economic landscape. Instead, say a growing chorus of critics, it is more like some other pillars of American capitalism: the rigid corporate behemoths that are now being

SCHOOL

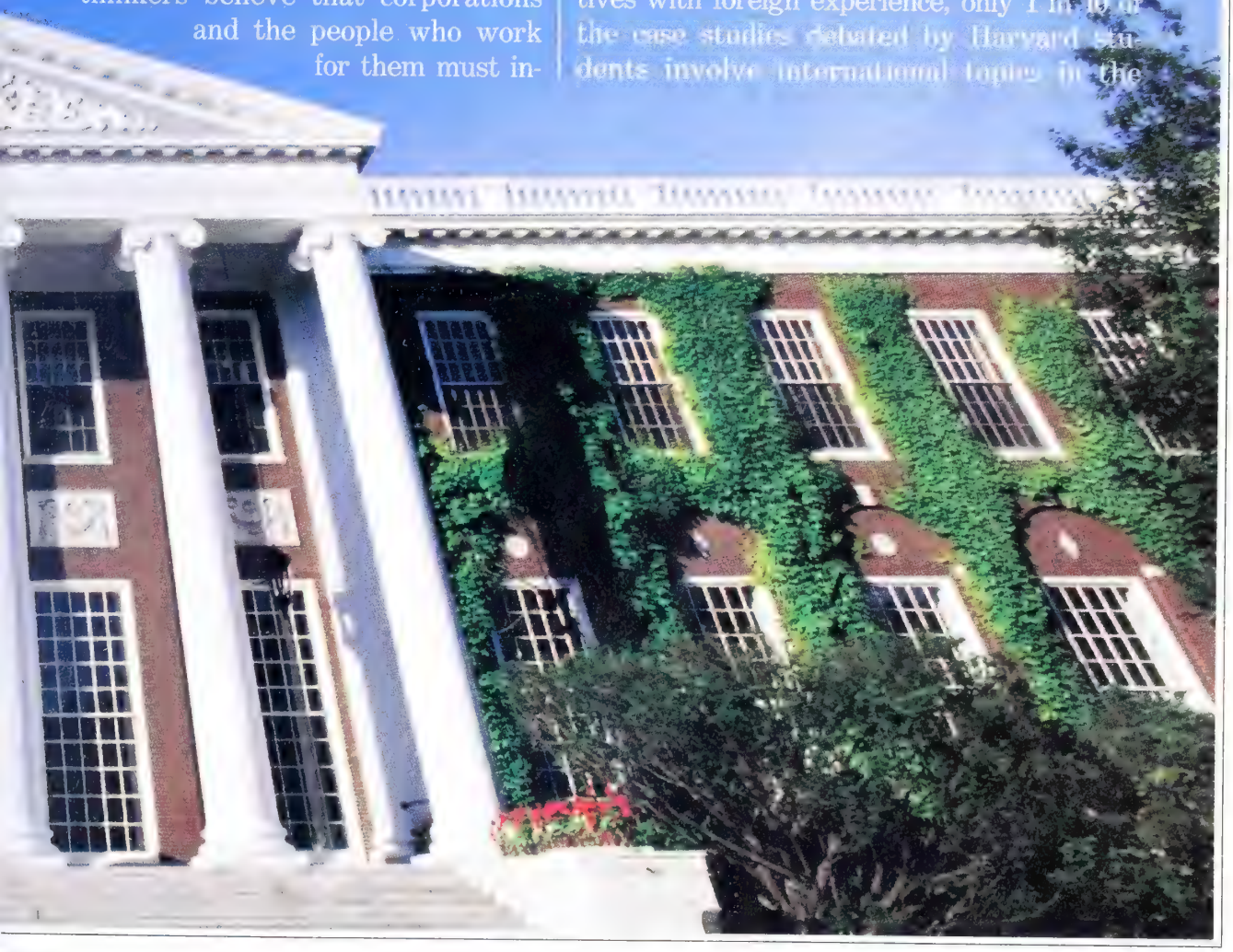
AN AMERICAN INSTITUTION IN NEED OF REFORM

racked and toppled by those upheavals. It's not a leader in management education," contends Richard M. Cyert, former president of Carnegie Mellon University and a former dean of its business school. It's been a follower. It's not too different from what IBM did for many years."

Consider:

At a time when leading management thinkers believe that corporations and the people who work for them must increasingly cooperate and collaborate to survive, Harvard remains the most Darwinian of B-schools—the only major institution with a forced grading curve in which 10% of every class receives low-pass grades, and a school that still requires little teamwork by its students.

■ In an era in which markets are global and U.S. corporations increasingly value executives with foreign experience, only 1 in 10 of the case studies debated by Harvard students involve international topics in the



first-year core curriculum. "Harvard is a prisoner of its own culture," says one Harvard professor. "It's an American institution that perceives the world in solely American terms."

■At a time when the U.S. work force is becoming more diverse and the ability to manage that diversity is an increasingly important executive skill, Harvard remains a relatively homogeneous institution. Only 5% of its 91 tenured faculty members are women. That compares with 12% at Northwestern's J.L. Kellogg Graduate School of Management and 9% at the University of Pennsylvania's Wharton School. And female students complain that case studies seldom portray women in decision-making roles.

Harvard isn't just failing to show management how to confront these and other vital issues, the school's critics say. In its insularity and rigidity, it might well be breeding insular, rigid managers, to the detriment of the corporations they'll help run. "The more Harvard succeeds, the more American business fails," says Henry Mitzberg, a management professor at McGill University.

A case in point, he says, is Harvard's distinctive approach to business education, its near-total reliance on the case-study method of teaching. Because it requires students to debate brief synopses of challenges confronting companies, the method may train managers to perform superficial analyses. "Harvard MBAs go through case after case and become experts trained to pronounce on companies they know nothing about," Mitzberg says.

NIMBLER RIVALS. The complaints about Harvard are rising in volume right now partly because of the mounting pressures U.S. businesses face. More than ever, critics say, America's leading business school should be offering creative ideas and producing young managers equipped to help companies confront these new challenges. And Harvard's failure to adapt to the vast changes in business is being placed in even starker relief now because dozens of other B-schools have already embarked upon intellectual soul-searching and radical changes in content and structure.

Lending still more urgency to the need for change is that Harvard can no longer boast that it has a lock on the best students. Some of the largest recruiters of MBA talent believe they can acquire similarly bright and well-trained people from a number of schools. "You're still going to get great intellectual capital at Harvard," says Anthony J. Conti, vice-chairman for human resources at Coopers & Lybrand. "But we are finding that many of the other top MBA schools are producing graduates of similar quality." About 12 of the 196 MBAs the accounting firm hired this year graduated from Harvard.

Indeed, like some other icons of American business, the IBMs and the GMs, Harvard is finding itself increasingly surrounded by nimbler rivals. Wharton has added interdisciplinary team-teaching, case studies on topical issues at major companies requiring presentations before executives, and monthlong international-study trips to Asia and Europe. The University of Michigan has made medical-style residencies, in which student teams work on problems at area companies, a key part of its MBA training. Columbia University began a program last fall that put more emphasis on managing in a global context and less on number-crunching.

"LOSING GROUND." Some of these dramatic changes resulted from wide-ranging reviews launched as early as 1988. It wasn't until last fall that Harvard announced a major review of its own MBA program—the first since the early 1960s. "My general impression is that they're losing ground," says George H. Labovitz, chief executive of Organizational Dynamics Inc., a leading consulting firm in quality management. "There's a sense that they're resting on their laurels."

John H. McArthur, the dean who for the past 13 years has quietly guided the school through the most tumultuous economic period of the postwar era, insists that Harvard is anything but complacent. "If we don't pay a lot of attention to what people want, they're not going to come," he says. He argues that his school continues to put some of the best students together with superb faculty, an intellectual meeting that has allowed Harvard to keep pace with a changing world.

In addition, he believes Harvard's forced-grading curve prevents grade inflation, and he defends the near-exclusive use of case studies as a clear competitive advantage. "Whatever anyone thinks about the

HARVARD'S REPORT CARD

C INTERNATIONAL Only 10% of the first-year case studies are international, and Harvard has no exchange pacts with non-U.S. schools. It does offer 9 elective courses on international topics.

B LEADERSHIP Harvard revised its core human resources course to address more leadership issues, but it's doing few creative or innovative projects here.

B REAL WORLD Case studies and teachers focus on real-world training problems, but there are no required consulting assignments or medical-style residencies with companies.

D TEAMWORK Forced grading curve discourages cooperation; courses require very little group work.

C TECHNOLOGY Only 5% to 10% of cases require use of computers; most innovative use of technology is in executive education.

A STUDENTS Attracts best and brightest with prestigious work experience and elite undergraduate degrees.

A FACULTY Boasts stellar lineup of professors with plenty of real-world contacts.

C DIVERSITY Although 29% of students are women, little more than 20 of 700 case studies feature female role models. Only 5% of tenured faculty are women.

C ETHICS Harvard added a "module" of ethics sessions, but it's non-graded and hasn't spared the school from embarrassing lapses in student behavior.

DATA: BUSINESS WEEK

HARVARD BUSINESS SCHOOL AT A GLANCE

THE SCHOOL

ANNUAL BUDGET	$135 MILLION
ENDOWMENT	$350 MILLION
ANNUAL MBA TUITION & FEES	$22,564
TOTAL EMPLOYEES	1,100
FACULTY	190

THE STUDENTS

ANNUAL MBA APPLICANTS	5,930
INCOMING CLASS SIZE	815
WOMEN	29%
NON-U.S.	25%
MINORITY	14%
MEDIAN STARTING PAY & BONUS	$83,000*

*1993 ESTIMATE

THE ALUMNI

ALUMNI BASE	59,265

SOME CEO ALUMNI:

FRANK SHRONTZ	BOEING
NOLAN ARCHIBALD	BLACK & DECKER
DANIEL BURKE	CAPITAL CITIES/ABC
REUBEN MARK	COLGATE-PALMOLIVE
JAMES HOUGHTON	CORNING
HENRY SCHACHT	CUMMINS ENGINE
WILLIAM AGEE	MORRISON KNUDSEN
LOUIS GERSTNER	IBM

DATA: BUSINESS WEEK, HARVARD BUSINESS SCHOOL

EAN McARTHUR: HARVARD IS ANYTHING BUT COMPLACENT

se method," retorts McArthur, "it dif-
entiates us."

Harvard also consistently captures
e No. 3 slot in BUSINESS WEEK's bi-
nual ranking of B-schools, which is
sed on surveys of their customers—
aduates and corporate recruiters.
here is no doubt in my mind that Har-
rd is the best business school in the
rld," says J. I. Cash Jr., chairman of
e MBA program. "Our applications are
, and 90% of the people we accept
ne here. For us, that's the market
t."

Many students, however, express
ubts about the responsiveness of the
hool to their needs. It didn't help last
l when Cash declared that "I have
ver and will never think of students
customers." He now maintains that
comment was taken out of context:
consider students partners. I hope
re is an emotional bond between fa-
ty and students that isn't covered by
e word customer." But the remark
cked some MBA candidates, who pay
average of $45,000 in tuition and fees,
s $125,000 in lost income to attend
school for two years. "It created un-
essary friction between students and
administration," says Ian Rowe, a
mber of the class of 1993.

McArthur does win high marks for
eping Harvard on a solid financial
footing and for recruiting faculty. "John has done a marvelous job at this place," says Carl S. Sloane, a Harvard professor and management consultant. "He's done a good job developing the faculty. He's kept Harvard on an even keel." And Harvard still has plenty of fans. "That school is powerfully staffed and brilliantly led," says Timken Co. CEO Joseph F. Toot Jr. who earned his Harvard MBA in 1961. "I don't think Harvard should change the fundamentals."

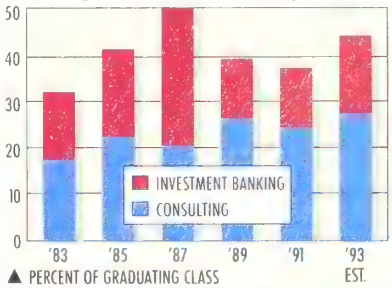
McArthur, an unassuming 59-year-old, took over the helm in 1980. Then a little-known finance professor and associate dean, he was the ultimate insider. He had come to Harvard from Canada as an ambitious student in 1955 and had never left, earning his MBA and a doctorate in business administration before beginning his teaching career. "It would be hard to identify someone else who has been more closely linked to the culture, tradition, and values of that institution than John McArthur," says Colin C. Blaydon, a former visiting professor at Harvard who had been dean of Dartmouth's Amos Tuck School of Business.

NUMBER-CRUNCHERS. When he became dean, McArthur inherited an institution that was already under fire. In an attack that implicitly criticized the school, two Harvard professors had published a seminal essay in the *Harvard Business Review*, "Managing Our Way To Economic Decline," which decried MBA programs for turning out people more interested in manipulating numbers than in making products. And Harvard University President Derek Bok publicly challenged the school's academic legitimacy.

The new dean began to rebuild the faculty by recruiting scholars from other schools. Among a dozen or so key recruits, he hired economist Michael C. Jensen from the University of Rochester and accounting guru Robert S. Kaplan from Carnegie Mellon. McArthur also added entrepreneurship classes, put

THE HARVARD CONSULTING AND INVESTMENT-BANKING SCHOOL?

Many Harvard business school MBAs still shun Corporate America, preferring lucrative jobs in consulting and investment banking



DATA HARVARD BUSINESS SCHOOL

more international cases into an almost exclusively American program, and added a nine-session, nongraded "module" in ethics. And like many schools, Harvard makes continual adjustments to its program and individual courses.

Most of the changes McArthur initiated early in his tenure haven't gone far, however. The entrepreneurship classes consist of a few electives, and the international cases amount to just 10% of the first-year total. At its core, Harvard is teaching today essentially the same curriculum it has taught since the early 1960s. Even when it adopts bold and different initiatives, the outcome often seems a bit disappointing. For example, Harvard became the first major business school to require incoming students to buy personal computers in 1984. But today, students say, only 5% to 10% of the 700 cases MBAs must dissect require computer work, and none are paperless.

Similarly, in 1986 Harvard became the first major B-school to stop using the Graduate Management Admission Test (GMAT) scores to evaluate applicants, in an effort to gain more students who would be less interested in consulting and investment-banking jobs. Harvard believed high GMAT scores correlated with interest in such positions, but the change failed to redirect large numbers of Harvard MBAs toward more critical jobs in U. S. corporations.

SHAD DOUGH. Harvard, after all, still attracts many of the business world's best and brightest, whose energy and intellect are sorely needed to help reinvent American industry. But nearly half its students still head into consulting and investment banking. That's not Harvard's fault, the dean says. "The kinds of jobs people take are a function of what kind of jobs are there," says McArthur.

Another area where critics say Harvard has failed to lead is ethics. Given a $20 million pledge by former Securities & Exchange Commission Chairman John Shad in 1987 to fund an ethics initiative, Harvard is doing nothing new or creative with the money, they say. The most visible reminder of Shad's gift is an $18 million physical-fitness center named for him just across the street from the greater university's athletic complex, although Harvard says none of Shad's money went toward the center. Only a year ago, administrators and professors in charge of the ethics initiative were all but certain that Harvard would add a second module in 1993. It has yet to get off the ground.

Nor has the initiative spared the school from embarrassing lapses in ethics by its students. One was denied his diploma in June after being indicted on insider-trading charges. A year earlier, a Harvard MBA candidate admitted to stuffing a finance-club ballot box to win election as club president. There are a few bad apples, McArthur admits: "I look at the students here, and there are some that you wonder how in the hell they ever got anywhere, but that's not most of them."

Through his years at the helm, McArthur has kept a low profile, shunning most interviews and speaking engagements. He decided against living on campus, preferring to raise his two children in a more normal environment in the Boston suburb of Wayland. At one point, students so seldom saw him that some commonly mistook the concierge of the dean's house for the dean. A recent graduate recalls that her section-mates pasted a picture of McArthur on a milk carton under the headline "missing."

The dean has many outside obligations. McArthur says he spends one to two days each week at Brigham & Women's Hospital, a not-for-profit teaching hospital with revenues of more than $500 million, where he serves as chairman of the board of trustees. He also sits on the boards of five public corporations, including Chase Manhattan Corp. and Springs Industries Inc., chores that earn him nearly $250,000 a year. His corporate directorships alone required that he attend 82 meetings last year. McArthur, however, says he attended 207 school-related dinners last year, including one with 10 selected MBA candidates every Thursday night when school was in session. He also held 20 breakfasts a year, hosting MBA students.

MBA CHAIRMAN CASH: "I CONSIDER STUDENTS PARTNERS"

As a corporate director, McArthur has no doubt come to see firsthand the changes sweeping through the business world. Whether Harvard's program will soon reflect those changes is another question. So far, the program review begun last fall has resulted in more minor adjustments. For example, the school has begun to assign class seating by computer, doing away with the frantic early-morning dash on the first day of class by students eager to get the best seats. "It was dysfunctional to have that much focus on something that was not related to their intellectual development," says Cash, chairman of the MBA program.

HIGH HOPES. Unrelated to the wide-ranging review, dubbed "Leadership and Learning," the school is shifting around several courses for next year in a move that will result in a reduction of quantitative work in the curriculum. Cash adds that the earliest, most optimistic date for what he terms "substantive structural

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changes" would be the fall of next year.

Some professors express high hopes that the review will lead to significant improvements at the school. "The changes under discussion range from a baby two-step to a radical overhaul," says Leonard Schlesinger, a Harvard professor who heads what the school calls its core design team. "I think the recommendations will cover virtually every aspect of what we do." The team is meeting at the Charles Hotel over the next few weeks to hammer out a range of alternatives to offer to the faculty in the fall.

For its review, Harvard visited nearly two dozen rivals and other organizations. The school also surveyed 150 companies that recruit MBAs, as well as 400 alumni. Those constituents believe the school needs to do a better job helping students work effectively in organizations as team players and leaders. They also think Harvard should teach some subjects, such as accounting, by lecture, rather than by case study.

By most accounts, Harvard's internal review needs to confront some critical problems. Among them is the sense that the program is stacked against the growing numbers of international stu-

TEACHING A HARVARD SPIN-OFF SOME NEW TRICKS

It would make an excellent case study in how not to manage a rapidly growing, highly profitable business. The financial controls were deficient. Marketing efforts displayed a poor understanding of the company's target audience. Lackluster investment in technology led to low product quality, long production times, and high costs. What's more, few of the organization's employees had relevant industry experience.

These problems plagued not an inexperienced startup, but the Harvard business school's lucrative publishing operations. The world's most famous school of management was badly mismanaging a $40 million-plus business churning out books, videos, teaching materials, and the *Harvard Business Review*. The deficiencies, outlined in a memo obtained by BUSINESS WEEK, led Dean John H. McArthur to spin off the operations into a nonprofit subsidiary of the university.

"SPAGHETTI." The operation, the memo made clear, was highly disorganized and haphazardly run. "They had an organization chart that looked like a pile of spaghetti," says McArthur. "The business was scattered in literally 15 places on campus, each with its own general manager or someone doing marketing."

Thanks to the strength of its franchise, Harvard earned handsome returns on the business in spite of itself. In the 1992 fiscal year, the school's publishing activities had net income of more than $11 million on some $42 million in revenues. The business sold 2.5 million reprints of *Harvard Business Review* articles and more than 4 million case studies from its teaching collection. It also published about 30 new books and several new video programs within the past 12 months. Harvard's videos alone, which include guru Michael E. Porter's *Competitive Strategy* selling at a cool $2,000 each, generated more than $14 million in revenues in four years.

But McArthur sensed that the business could perform better. In search of greater efficiencies, the dean called in McKinsey & Co., the largest single recruiter of Harvard's MBAs, in the fall of 1990 to examine the publishing outfit. The consulting firm recommended that he consolidate the operations in one location, establish the publishing group as a separately incorporated subsidiary, and hire seasoned professionals to manage it.

HARVARD BOOKS AND VIDEOS: SALES WERE UP 20% LAST YEAR

The dean followed the advice, recruiting Ruth R. McMullin, the former chief executive of publisher John Wiley & Sons Inc., in late 1991. She got off to a rocky start, recruiting a new editor of the *Harvard Business Review* who lasted barely four months before learning from reporters that he was losing his job. McMullin, a 1979 graduate of—perish the thought—Yale University's School of Management, is said to be earning $500,000 a year to run the nonprofit group with 128 employees.

She describes the Harvard Business School Publishing Corp.—now housed a half-mile from campus in a modern building located at 230 Western Ave.—as a "jump startup." Says McMullin: "It was large, prestigious, and powerful before, and we think it has tremendous growth potential, well in the double digits." Revenues rose by some 20% last year, she adds, an increase that would put annual sales at nearly $50 million. Harvard believes it can hike the group's revenues by $100 million over the next five years.

To achieve that goal, McMullin believes the school needs to market its products more heavily to Harvard's prized alumni base. Before, the publishing group didn't even have access to the alumni list. More recently, she used alumni contacts to successfully stage a live classroom discussion featuring a trio of Harvard professors via teleconference. The two-and-one-half-hour satellite session on improving service hooked up an audience of 6,810 people in 65 locations. Each alumnus anted up $40 to attend the event. Nonalums paid $50 each. With McMullin working hard to make the business more efficient and productive, this might turn out to be one case study Harvard will eagerly write up.

By John A. Byrne in Boston

nts. Since half of a course's grade is sed on class participation, internation- students who are less fluent in Eng- n are at a distinct disadvantage. That s less a concern when fewer of Har- rd's students hailed from abroad, but lay 1 of 4 is from outside the U. S.

A survey by the student newspaper s year showed that non-U. S. students 96% of the lowest grades in Market- and 71% in Management Communica- ns. "I worked harder than the average nerican student, but I couldn't express yself well in class," says a Japanese aduate of the class of 1993. "I felt mis- able." He graduated but feels Harvard ould rethink its grading system and quire professors to encourage more rticipation from non-U.S. students.

And for years, many female MBAs ve complained that the discussions in rvard's modern, tiered classrooms re- ct a male-dominated business world re appropriate to the 1950s or 1960s. udents say little more than 20 of the) case studies feature female protago- ts. "The cases don't reflect the reality the work world," says Sara Ann owning, a '92 graduate who works as consultant for Price Waterhouse. "I s looking for role models and men- s. At Harvard, you didn't get to see men making important decisions."

EPTICS. The school also trails in the mber of group exercises and projects signed students to develop teamwork d leadership skills. One recent gradu- says she participated in only three oup projects over two years. By con- st, three of four classes require collab- ative work at Northwestern's Kellogg hool, which corporate recruiters in SINESS WEEK surveys deem the best producing team players. Kellogg's stu- nts engage in roughly 70 team pro- ts, assignments, and exams, often re- ving group grades. "Students at rvard don't work well together," com- ins a 1992 alumnus of the school. "The ade system makes people animals."

Some are privately skeptical the re- w will spark major changes. A former ofessor notes that having as many as) faculty members involved in the re- w is likely to bog it down. Adds econ- ist Jensen: "It would be foolish to there is widespread agreement on ything. The world is changing, and ge organizations change slowly. I don't nk Harvard is dramatically different."

As so many American institutions bat- ng new, tougher competition have rned, transformation from within nes slowly and painfully. And like em, Harvard is discovering that being pillar of American business is one ng when the world around you isn't anging—and quite another when the ound is shifting beneath you.

By John A. Byrne in Boston

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THE BIG SQUEEZE ON SMALL BUSINESSES

To survive in tough economic times, they're having to slim down and team up

For years, Jerry Weaver's formula for success was simple: Sell a good product at a good price and—just as important—stay chummy with the customer. That philosophy helped him build Mid-South Industries, a contract manufacturer that makes a variety of items, from toaster ovens to plastic toner bottles, into a $110 million business in the 1980s. Then came the sobering 1990s. One of Weaver's biggest customers, Xerox Corp., sent a team of auditors into his Gadsden (Ala.) plant in June, 1990. Their findings: Mid-South fell far short of the new efficiency standards Xerox had set for suppliers to help it trim costs. "They took me behind the woodshed over quality problems and a high cost structure," admits Weaver.

Threatened with losing a big chunk of his business, Weaver spent the next two years hacking away at costs and improving productivity. He invested $400,000 to upgrade his assembly line with robotics and other computer automation. A further $1 million went toward training his workers in how to be more efficient. In the end, Weaver managed to trim his annual operating costs by 5% while nearly eliminating product defects.

NO BLOAT. Mid-South's tale is hardly unique. Faced with the same tough economic climate, rising costs, and severe competitive pressures that have forced big corporations to become lean and mean in recent years, small companies are going through their own painful restructuring. "Suddenly, the rules of survival have been rewritten, and they need to take a much more sophisticated approach to their businesses," says John A. Davis, president of the Owner Managed Business Institute, a consulting firm in Santa Barbara, Calif.

There are stark differences however, in the remedies available to small companies as they strive to become more efficient. They are not apt to have bloated bureaucracies to pare down. So small companies have to take more innovative approaches. Some are pooling their efforts in such fields as marketing and distribution. Many have even formed purchasing cooperatives so they can buy in bulk and obtain better prices from suppliers. Others, such as Mid-South, are training their workers to be more productive (table).

CHANGE OF HEART. Until recently, efficiency hasn't been a primary concern for small-company owners. Just staying in business was enough of a worry. But attitudes have changed dramatically. Last November, a survey of 100 small and midsize businesses by Arthur Andersen & Co. and National Small Business United, a trade group, found that 68% of those queried had improved their company's productivity in the previous 12 months. Only 30% reported improved productivity in a similar survey in June, 1992.

> "Our margins are getting beat to a pulp. The big guys have had better buying power."

Why the change of heart? For one thing, small businesses are finding that their payroll outlays are soaring, largely because of health-care expenses. Since 1991, the cost of health insurance for companies with fewer than 72 employees has risen as much as 44%, according to benefits consultant Towers Perrin. In comparison, the biggest U.S. companies have seen their health costs rise 32%. Small businesses still typically spend less on employee benefits than large companies, but current proposals for health-care reform are likely to narrow the gap.

Small businesses are also feeling the trickle-down effect of the pressures of

g corporations. That's ost apparent among ppliers such as Mid-uth, which are being rced by customers to tchet up quality while wering production sts. "We had several ousand suppliers in the d-1980s. Now, we have , and we're cutting at number back even ore," says Robert reenslade, a purchasing anager for Xerox.

Then there's the com-titive challenge—and t just from other small mpanies. Big corpora-ons are stealing into ny niches they would ve scoffed at in more untiful times. "Rather an be niched to death, they are be-ming micromarketers themselves," ys David Reibstein, marketing profes-r at the Wharton School. Both Pepsi-Inc. and Coca-Cola Co., for example, cently launched bottled iced teas to atch market share from tiny Snapple everage Corp. and other small outfits.

Often, productivity gains may be a atter of life or death for small compa-es. Phillip H. Harris made that dis-very in 1991, when he acquired Quad-ech, a $10 million-a-year maker of gineering test equipment. Costs, such health-insurance premiums, were ris-g, while the Bolton (Mass.) company's les were stagnating in the weak econ-ny. "We had a six-month window of portunity to get more efficient—or go der," says Harris.

RMED OUT. To survive, Harris first nted down a new insurer and bar-ined for lower rates. Next, he took a rd look at his assembly line, assigning engineer to scrutinize how each of adTech's products was manufactured. hat the engineer found amazed Harris: outsourcing some of the manufactur-g and redesigning products to accom-odate standard parts, Harris uld save $300,000 a year. rrowing a tactic used for ars by bigger companies, arris farmed out a number manufacturing jobs to Tai-an. Ultimately, he eliminat-20 out of 85 assembly-line os. The results have been pressive: Gross margins ve risen from 35% to 41%.

QuadTech managed to trim aff, but many small compa-es don't have that option. to Engineering Inc. in Carpen-sville, Ill., an electrical-switch aker with $13 million in sales, ured it needed every worker it had. In 1988, the company improved the productivity of its largely unskilled work force by providing math and English lessons. That enabled workers to read plans more accurately. Nowadays, Otto spends $100,000 a year teaching its 120 employees advanced subjects such as blueprint reading and quality improvement, in addition to rudimentary skills. The payoff? Production has risen 340% since 1988, to 119,000 switches.

A mini-counter on a small phone system and TV ads to keep pet owners from poaching his vaccination trade

Increasingly, small companies are finding that they can reduce costs through strategic alliances with other small companies. In February, 121 New York office-supply dealers joined forces with the largest independent wholesaler of office products, EMCO Sales & Service Inc. Together, they formed the American Association of Office Products Dealers, a purchasing co-op that buys products directly from manufacturers.

Co-op members say they are now in much better shape to cope with the expansion of superstores such as Staples. "Our margins are getting beat to a pulp, because the big guys have had better buying power," complains Howard Pilmar, president of King Group, an office-supply retailer and printing company. But thanks to the co-op, Pilmar says he has already lowered his costs. For example, he is now able to buy a box of letter file folders for $2.70, which is a 23% savings. In turn, Pilmar says, his gross profit margins have risen to 35% from 31%.

RABIES RIVALS. Other small companies are investing in technology to keep their businesses growing. Just a few months ago, Bob Antin, CEO of Veterinary Centers of America, a 20-unit chain of animal hospitals based in Santa Monica, Calif., was alarmed when local pet stores began offering limited storefront veterinary services such as vaccinations. Antin decided to fight back by advertising his services on local TV. But he figured mass advertising would bring in lots of phone calls, and he couldn't afford to hire operators 24 hours a day. The solution: Antin invested $100,000 in a state-of-the-art phone system in April that automatically routes calls to his nearest hospital. Previously, each hospital handled its own calls. Antin hopes the new phone system will help boost business by 45%. In 1991, his company had $1 million in sales.

Of course, restructuring entails sacrifice, especially for small businesses that operate close to the edge. Mid-South's Weaver says that the expense of worker training and new equipment has squeezed his margins to a paltry 2%, down from 6% in 1989. Still, Weaver figures it's worth it. Sales are up 55%, to $170 million, thanks in part to an appreciative Xerox. And he feels margins are already picking up: "We've got systems in place that are going to keep getting us more and more efficient each year." Just like his big-company counterparts, Mid-South's CEO has come to realize that survival may depend on it.

By Laurel Touby in New York

SMALL CO

SMALL BUSINESS TUNES UP

UPGRADING WORKERS' SKILLS Small companies are investing more money in basic skills training to enable employees to master new technologies

FORGING ALLIANCES Many share distribution networks and manufacturing facilities

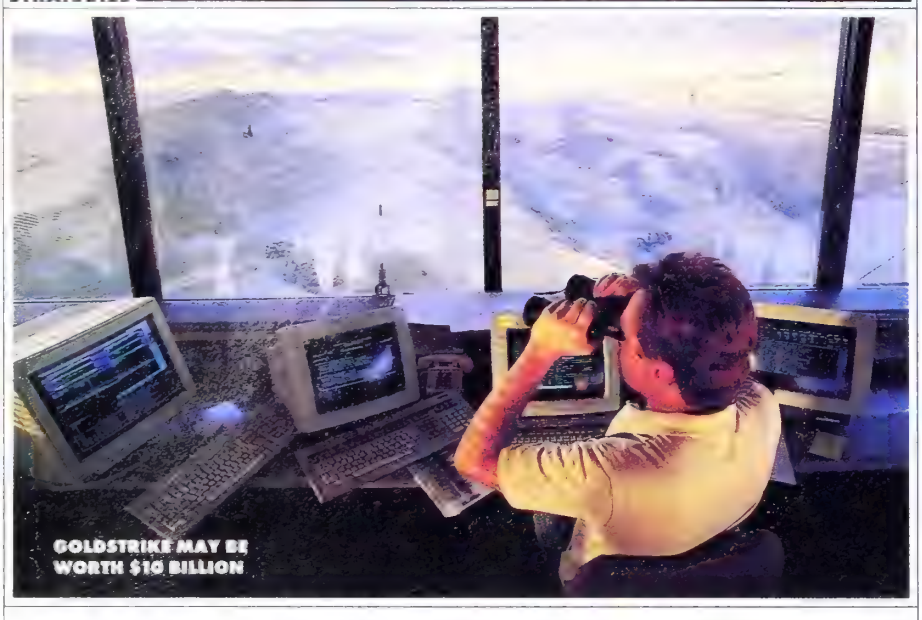
OUTSOURCING Instead of adding new employees, small businesses are hiring outside companies to handle everything from clerical chores to sales

BUYING SMARTER Some small companies are forming cooperatives to buy supplies in bulk to get better deals from manufacturers

GOING HIGH-TECH Small businesses are improving operations by adding sophisticated telecommunications and computer systems

PHOTOGRAPH BY STEVE GOLDSTEIN; ILLUSTRATION BY FRANK COCOZZA

STRATEGIES



GOLDSTRIKE MAY BE WORTH $10 BILLION

A GOLD STANDARD IN MINING OPERATIONS

How American Barrick manages to shine in a tough market

Ten years ago, Canadian entrepreneur Peter Munk was looking for a fresh start. With oil prices plunging, the former hotel owner's plan to build a Toronto-based oil-and-gas company was heading for the rocks. Before long, he hit on gold. True, the precious metal had nosedived to around half the $850 an ounce it traded at in 1980. But Munk decided "this was my chance" to get in at the bottom.

Was it ever. Even though gold hit a two-year high of $393 on July 6, the precious metal has been a lackluster performer for years. The same, however, can't be said of the gold-mining company Munk founded: American Barrick Resources Corp. Profits at the Toronto company have climbed more than 70% a year since 1989. For 1993, Kidder, Peabody & Co. analyst Marc D. Cohen estimates that earnings could increase 25%, to $218 million, as revenues rise 16%, to $629 million. Barrick's stock, traded in both New York and Toronto, has soared 71% since the start of the year, to 26¼. That pace may be difficult to sustain. Barrick is trading at a pricey 29 times 1994's projected earnings vs. 23 for the Standard & Poor's 500-stock index. Still, with a market capitalization of $7.5 billion, Barrick is worth more than metals giants such as Newmont Gold and Alcoa.

There's no denying that Barrick's fortunes owe much to its Goldstrike Mine, near Elko, Nev. Munk purchased the mine from Western States Minerals in 1987 for $62 million. At the time, it had proven reserves of 600,000 ounces. But later discoveries show that the mine holds some 25 million ounces, valued at almost $10 billion. To develop it, Munk had to recruit some 1,300 miners. And to house them, he brought in a developer to build hundreds of homes. Barrick even waived the downpayment on the homes for some employees.

Munk's unique management also has a lot to do with Barrick's success. The company has among the leanest cost structures in the industry. Barrick spends $143 to produce an ounce at Goldstrike—just over half the industry average. Part of the credit goes to Munk's no-frills style. The company is run out of the same cramped Toronto townhouse where it was founded. And its senior management numbers no more than a dozen executives, some of whom don't even have their own secretaries.

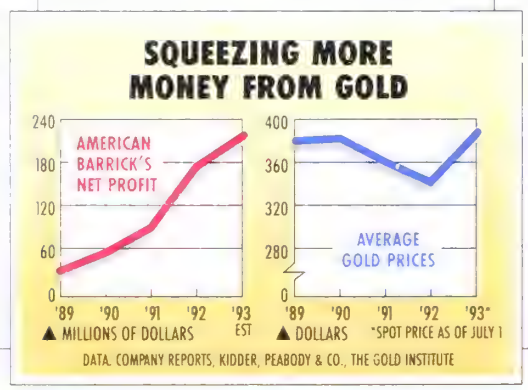
Technology has also allowed Barrick to keep overhead in check. The Goldstrike mine, for example, boasts the largest and most sophisticated autoclaves in the industry. The six machines pump oxygen into ore, which makes it easier to extract gold by using chemicals. They're part of a $500 million computerized system that produces 3,600 ounces of gold every 24 hours.

Incentives are also a big part of Munk's strategy. While top executives get salaries 5% to 10% below the industry norm, they can qualify for lucrative stock options if the company does well. The program has already made a number of Barrick executives wealthy. Last year, President Robert M. Smith netted $3.7 million after exercising options he received in 1987. Under Canadian securities laws, the company isn't required to disclose Munk's compensation, although his 2% stake in Barrick is valued at $150 million. Even the company's workers have bonus plans. Miners at Goldstrike can earn an extra 10% above their average annual salary of $40,000 if they meet monthly production quotas.

Munk, 65, realizes that Barrick isn't immune from gold-price fluctuations. That's why Barrick has devised a hedging strategy that analysts say is the most extensive in the industry. Barrick has sold forward contracts to cover its total production through the end of 1994 at a price above $400 an ounce. For example, Barrick has contracted to deliver its December, 1993, production at $410. If the spot price fails to reach that level when the contract expires, Barrick would receive the higher contract price. Such hedging enabled Barrick to obtain an average price of $422 an ounce last year, considerably above the spot price of $344.

Munk admits it will be difficult to maintain the recent earnings stride. Barrick should be able to boost production by 54%, to 2 million ounces a year, by 1995. But to grow beyond that, it must find new reserves. Barrick is already looking for gold mines in Mexico and Chile. There's even talk of buying reserves in Indonesia. That would be quite a departure for Barrick, which has mined gold only in North America. But then, Peter Munk knows a lot about fresh starts.

By William C. Symonds in Elko, Nev.



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REWRITING THE RULES OF VENTURE CAPITAL

The startup-financing establishment that scorns David Blech is beginning to mimic his methods

To David Blech, rebel venture capitalist extraordinaire, the orthodoxies of his field are too stodgy. At first glance, venture capital may sound like a high-wire endeavor: VC firms risk their investors' money to fund startups. But the truth is that the VC community is a pretty conservative bunch. They prefer to parcel out equity investments piecemeal, a year at a time, depending on the outfit's progress. The payoff can take as long as seven years, until the company is mature enough to sell stock to the public.

That leisurely process is not for Blech, who puts big money into deals at the outset and extracts his profits as quickly as possible (table). The shy former stockbroker who heads Manhattan-based D. Blech & Co. has made himself enormously rich—and often unloved—by challenging the niceties of traditional venture financing. "I don't pay attention to my critics," says the 37-year-old financier, who has formed 15 companies and amassed an estimated $300 million net worth since he started a dozen years ago. "Some others aren't capable of competing with us."

DESTRUCTIVE? Focusing on the iffy world of biotechnology, Blech often forms a company himself, personally lends it seed money, and recruits well-known names as co-founders, who in turn help attract private equity funding from his network of wealthy investors. Then he takes the company public in a year or so—long before it's profitable. What really galls his critics is that Blech exacts fees from the usually red-ink-gushing company to help cover his outlays. And he makes sure he gets a nice dollop of extremely cheap "founders' stock," which allows him to do very well when he cashes out after the initial public offering.

Conventional VC types regard his tactics as not only heretical but destructive. They like to think of themselves as strict and long-suffering parents of difficult progeny that require plenty of time and TLC to mature. Typical of the mistrust some old-line VC providers have for the turbocharged Blech approach is the view of A. Grant Heidrich, a partner with Mayfield Fund, based in Menlo Park, Calif.: "There's a lot of merit to having accountability and responsibility as an enterprise evolves."

Maybe. But guess what? Blechism is spreading. Some members of the VC establishment who used to disdain Blech as a rapacious parvenu are now doing Blech-style deals. The ultimate white-shoe VC firm has even agreed to do one with Blech. San Francisco's Kleiner Perkins Caufield & Byers is joining forces with him to raise $30 million this year for fledgling Neurocrine Biosciences Inc., a La Jolla (Calif.) startup that hopes to develop drugs for the treatment of such diseases as Alzheimer's

What got Kleiner Perkins' attentio was Blech's enlistment of George F Rathmann, the legendary founder of bio tech winner Amgen Inc., in 1990 to hea a startup called Icos Corp. Marvel Kleiner Perkins partner Brooke Byers "That was a real wake-up call for me. Blech has also won new respect fro the old-line crowd for his investments t prop up ailing and already-existing bio tech companies like Ecogen Inc.

Thus far, Blech's imitators are stayin with biotech, which, despite its ups an downs in the stock market (down latel partly from fears about the Clinto health plan), is still a hot area for ve ture investment. Rich investors are ca tivated by the allure of lifesaving ne drugs—not to mention their high prof potential. And Blech's fast-forwarde funding helps accelerate their prospect

HOW BLECH GOES AGAINST THE GRAIN

RECRUITING FLASHY NAMES

Traditional venture-capital types wait for a fledgling company to come to them. B Blech often signs up big-name talent to form an outfit, figuring their reputations w attract financing.

BIG MONEY UP FRONT

The venture-capital establishment prefers to dole money out to a company in drips and drabs, depending on its progress. Blech, using money raised from rich individual investors, gives it a huge wad of equity financing at the start as well as loans out of his own pocket.

GOING PUBLIC EARLY

The orthodox method is to wait five to seven years, until the company is profitable or close to it, before doing a stock offering. Blech goes public in a year or two if the company's prospects permit. This lets him and his investors cash out more quickly.

CHEAP STOCK AND FEES FOR HIMSELF

Unlike conventional venture capitalists, Blech buys ultracheap "founders' stock" and charges the company fees for his equity fund-raising services, which recoups the money he has lent it.

To be sure, it takes years and years of als by the Food & Drug Administra- n before a biotech company can actu- y sell a new drug and turn a profit. Of e 24 companies now in Blech's portfo- , none is in the black. His first compa- , Genetic Systems Inc., a maker of gnostic tests, was a superscore for n when he sold it to Bristol-Myers Co. · $294 million in 1985. But Genetic Sys- ns, which had developed an HIV test, s still unprofitable in 1990 when Bris- -Myers Squibb Co. unloaded it to San- Diagnostics Pasteur Inc. for an esti- ted $20 million. Only lately, says nofi, is it making money.

MP START. But Blech doesn't care that ich. He has long since cashed out. hile he's in a deal, Blech lavishes at- tion on the fledgling business—serv- on its board, providing management d financial help. And to show that he nains committed, Blech never sells his ke during the IPO. But he doesn't ng around much after that, and be- e he leaves, he usually manages to ke a healthy pile.

Take Icos, which went public at 8 in d-1991. Blech gradually sold off his 7% sition in late 1992 and early 1993 at ces that swung between $6 and $10 a are. While his total investment was ly $1 million, his profit was 10 times it. Blech says he gets out of such uations when he's not as involved in operations anymore and his capital is eded elsewhere.

Regardless of when he liquidates his ke, Blech's strategy of taking founders' stock and fees has done a nice job of keeping him ahead. His latest big deal, for ARIAD Pharmaceuticals Inc. in Cambridge, Mass., is a case in point. Last year, ARIAD became the largest startup in biotech history when Blech, with the help of an investment-banking team led by Wertheim Schroder & Co., floated a $46 million private equity offering. Blech's fee for the transaction was almost $2 million. That helped offset the $2.5 million he had laid out: a $2 million loan he had previously made to ARIAD (since converted into stock) and the $475,000 in founders' stock he bought at one-tenth of a cent per share. Of course, the $2 million fee wasn't pure profit: Underwriting expenses ate part of it.

BLECH'S FIRST DEAL TURNED HIS $10,000 INVESTMENT INTO $10 MILLION

Still, says Samuel D. Waksal, head of ImClone Systems Inc., a New York biotech outfit: "David does well with the fees. That's why everybody is mad at him—and jealous of him." ARIAD is eyeing an IPO, yet has held back because of the market's current lack of enthusiasm for biotech. Once ARIAD goes public, Blech is free to sell his 13% at a nifty gain, since the stake is mostly made up of dirt-cheap (to him) founders' stock.

Blech, who has no science background, came upon the biotech bonanza by accident. Working as a stockbroker in 1980, he noticed the successful $35 million public offering of Genentech Inc., the first biotech company to do an IPO.

A year later, Blech, his brother Isaac, and a consulting scientist formed Genetic Systems. Blech paid a penny a share for founders' stock. So in 1982, when Genetic Systems went public at 1¼, he was rich. He got richer still in 1985, when the company was bought by what was then Bristol-Myers at 10½. His $10,000 initial investment became $10 million. In 1989, his brother left to do his own deals.

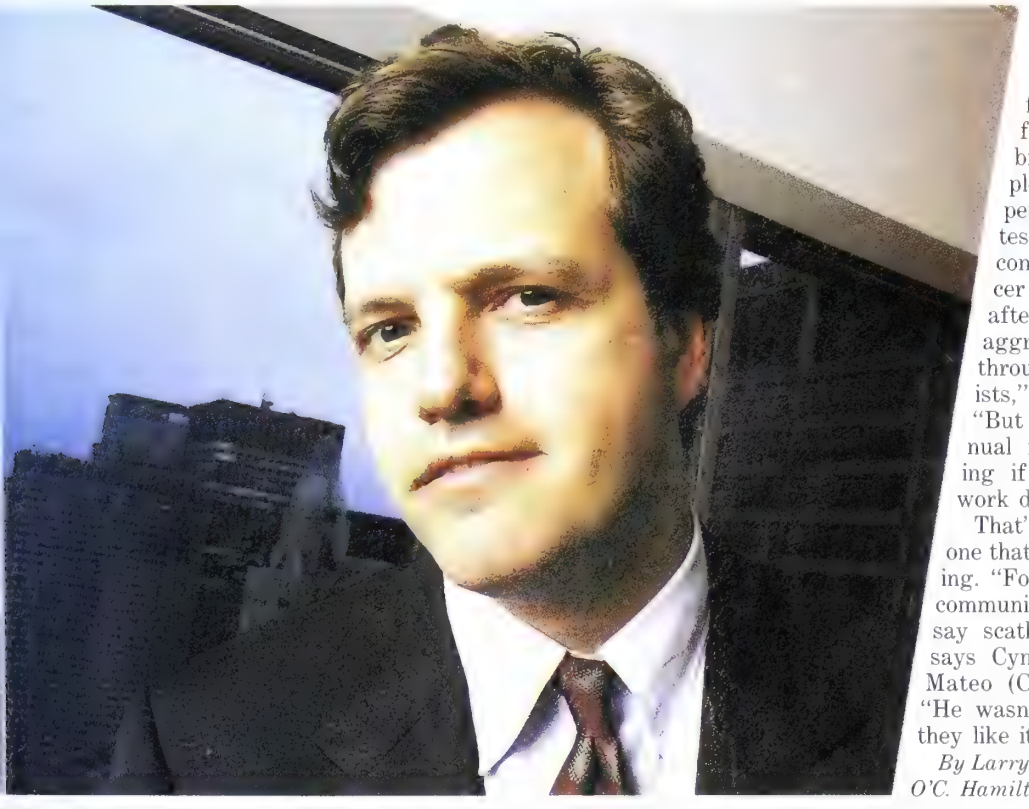
Blech can be impetuous. One biotech CEO says Blech "gets an idea and he's on the phone to merge your company before he has even called you." Nevertheless, those who have dealt with Blech credit him with superb preparation. On his firm's 40-person staff are eight science experts who scout out promising work in academe or at other biotech companies that he can construct a company around. And Blech ensures that sterling names join the new startups to add luster to the private-equity and IPO prospectuses. ARIAD's advisory board boasts Nobel laureates David Baltimore and George E. Palade.

Is Blech's early megamoney good for biotech? Some accuse ARIAD and its ilk of squandering the cash on high salaries, plush facilities, and gold-plated equipment. Worse, heavy upfront outlays haven't yet translated into profits.

But Blech and his defenders retort that quick funding speeds possible breakthroughs. One example: Seattle-based Cell Therapeutics Inc. is ready for FDA testing of Protec, a drug to combat the side effects of cancer treatments, just two years after Blech founded it—a very aggressive schedule. "We went through other venture capitalists," says CEO James A. Bianco. "But successive rounds [of annual financing] weren't appealing if you were trying to get work done."

That's a powerful argument—one that the VC gentry is now heeding. "For a long time, the venture community could be counted on to say scathing things about Blech," says Cynthia Robbins-Roth, a San Mateo (Calif.) biotech consultant. "He wasn't one of them." Whether they like it or not, he is now.

By Larry Light in New York and Joan O'C. Hamilton in San Francisco



ROBIN SELLICK

THIS HYBRID MAY THRIVE IN HIGH-TAX SOIL

The variable annuity is getting a big boost from Washington

It's always been a great idea: an investment that marries the mutual fund with the tax-deferral features of an insurance policy. But while mutual funds exploded over the last decade, the variable annuity has remained largely overlooked by investors, and undersold by brokers, insurance agents, and financial planners. Mutual funds have nearly $1.8 trillion in assets, but there's only a little over $100 billion in variable annuities (chart).

But now, the variable annuity is becoming a hot item. Sales have been growing at a 25% annual rate, according to Kurt Cerulli of Cerulli Associates Inc., a Boston financial-consulting firm. He expects assets to double over the next few years.

SNAPPY RETURNS. In part, the surge in variable annuities is coming from investors trying to beat the measly yields on certificates of deposit and money-market funds. Many of the annuities are providing snappy returns (table). The variable annuity is also attracting aging baby boomers who are thinking about retirement. And the fund industry itself is revving up an array of new funds. "Every brand-name mutual-fund company is getting into it," says R. H. Carey, publisher of *VARDS Report*, which covers variable annuities.

But variable annuities will get their biggest boost from Washington. The pending budget bill boosts taxes for upper-income taxpayers and sets the highest rate at 39.6%. Coupled with state and local income taxes, high-income investors in some states may soon face marginal tax rates of nearly 50%. That makes the annuity's tax-deferral features alluring.

"If everyone understood the impact of taxes on their investments, they'd have 50% of their investments in variable annuities," says William S. Young, a senior vice-president of First Financial Group in Baltimore. Young compared the 1983-92 return of the Guardian Park Avenue Fund and a Guardian Life Insurance Co. of America variable annuity with a similar investment strategy. The mutual fund delivered an average annual return of 15.8%; the annuity, because of higher fees and expenses, earned 14.8%. But after taxes, computed at the 34.5% rate, the fund return was only 11.6%, making the annuity the hands-down winner.

THE BEST-PERFORMING VARIABLE ANNUITIES

These variable annuities earned the highest ratings from Morningstar Inc., based on risk-adjusted total return. Figures include fund operating and insurance expenses but not sales charges, surrender charges, or contract maintenance fees.

Fund	Three-year average annual total return*
MANULIFE ACCOUNT 2 ANNUITY REAL ESTATE SECURITIES	21.4%
LIFE OF VA. COMMONWEALTH/OPPENHEIMER HIGH INCOME	20.6
BANKERS SECURITY USA PLAN/OPPENHEIMER HIGH INCOME	20.4
MONYMASTER SMALL CAP PORTFOLIO	19.7
EQUITABLE EQUI-VEST AGGRESSIVE STOCK PORTFOLIO	19.1
XEROX ACCT. FORPERFORMANCE VAN KAMPEN HIGH YIELD	17.5
UNITED INVESTORS ADVANTAGE II VA GROWTH	16.9
MFS/SUN (US) REGATTA HIGH YIELD SERIES (SP)	16.7
GUARDIAN INVESTOR/GUARDIAN STOCK (SP)	16.6
PHOENIX HOME LIFE BIG EDGE PLUS GROWTH	16.2

July 1, 1990-June 30, 1993 DATA MORNINGSTAR INC

True, annuity investors will eventually pay taxes, but not until they start withdrawing them in their retirement years, when their tax rate will likely be lower.

A variable annuity is actually an insurance policy. Each policy, or contract, offers a number of funds, or "subaccounts," in which to invest. Most offer equity, bond, and money-market subaccounts, and some have foreign, real estate, and specialty portfolios, too. Many subaccounts are mutual-fund clones, with the same portfolio manager and investment strategy.

But what makes the variable annuity different is the "wrapper." That's the insurance part of the contract, and it's what makes the cost of owning an annuity greater than a mutual fund. Atop expenses incurred by the fund portion for management and other services, the insurer levies a "mortality and expense," or "M&E" charge, which can be as high as 1.4% a year. That fee guarantees that if the investor dies, his or her annuity will always be worth at least as much as the money he or she put in. There's an annual administrative charge of $25 to $35 as well. All told, those charges add up on average to more than 2% per year. And that's before "surrender charges" of up to 7% that many annuities levy on early withdrawals.

CROSS-LICENSED. When an investor retires, he or she may "annuitize"—use the nest egg—to purchase a lifetime income from the insurer—or make systematic withdrawals, just as he or she would draw on a mutual fund or bank account.

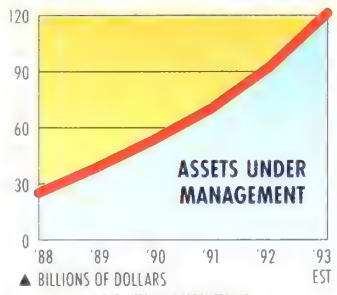
Since the variable annuity is a hybrid combining both securities and insurance, regulators require that anyone selling them obtain licenses in both fields. "It's always been a great product with no one to sell it," says Young, who thinks the problem will ease as more sales personnel become cross-licensed.

Mutual-fund groups that sell directly to the public such as Fidelity, Vanguard and Scudder, all proffer variable annuities without salespersons and with some success. But the powerhouses are the more traditional insurers, such as Lincoln National Life Insurance Co. with $2.7 billion in 1992 sales, and Hartford Life Insurance Co., with $1.8 billion.

Still, there is a mutual-fund connection in each. Lincoln features funds from the American Funds family, while Hartford has Putnam Funds. "As people become more savvy about mutual funds, they're looking for fund-like investments," says Jennifer Strickland, editor of the *Morningstar Variable Annuity/Life Performance Report*. Go ahead and factor in the ability to defer taxes on profits, and it's easy to see why the variable annuity is becoming one of the hottest investments of the decade.

By Jeffrey M. Laderman in New York

VARIABLE ANNUITIES ARE CATCHING ON



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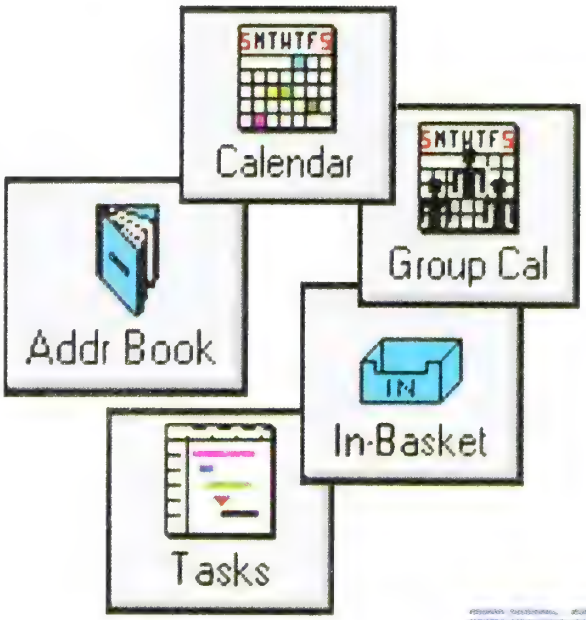

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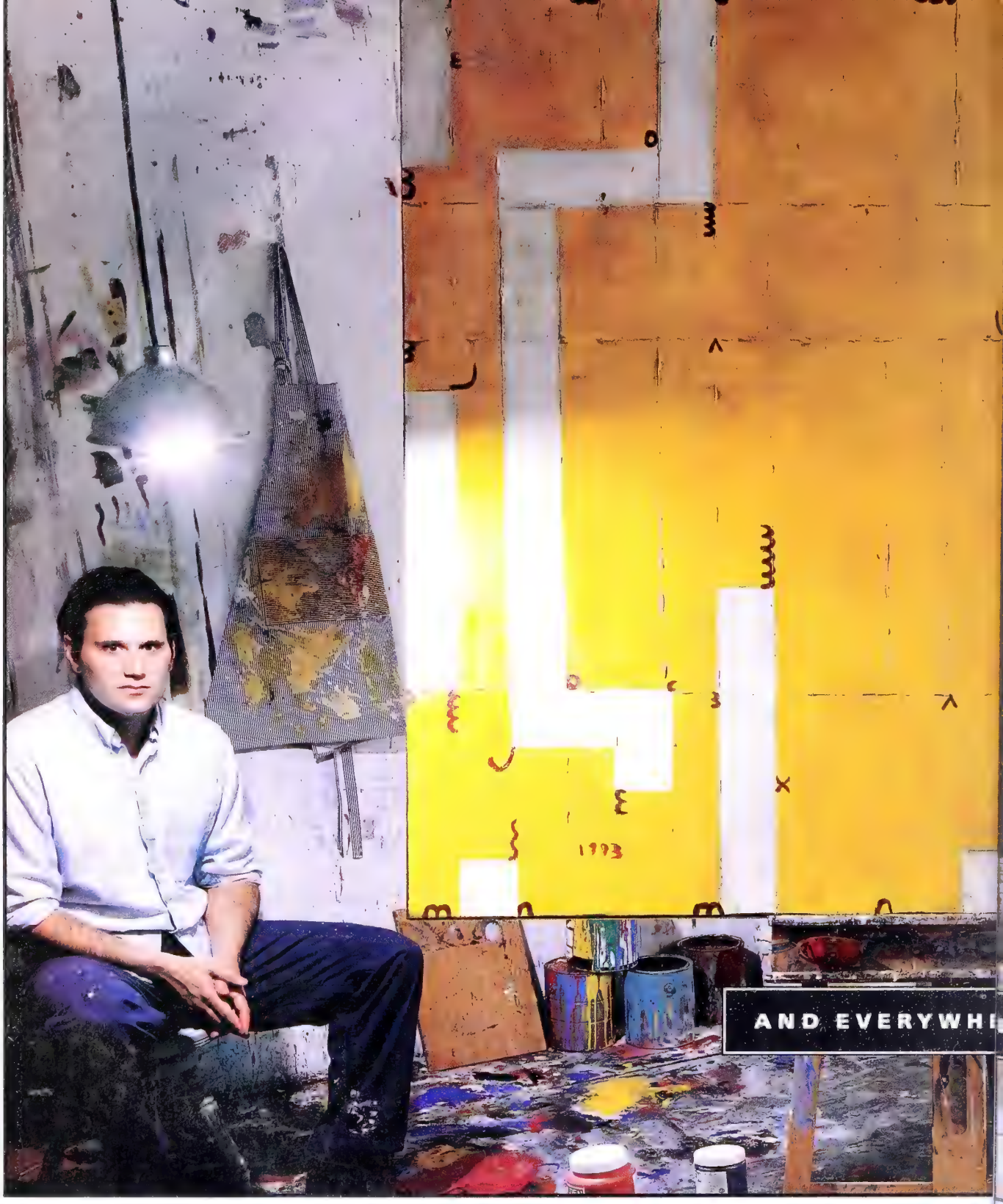

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NOW, INSURERS GET PAINTED WITH REDLINING CHARGES

Congress and state regulators begin probing claims of bias

The allegation has been simmering for years, ever since the Watts riots of the late 1960s. According to community activists, insurance companies routinely engage in redlining—discriminating against applicants from certain geographic areas, usually low-income and minority neighborhoods. But compared with the heated debate over bank redlining, these charges, typically denied by insurers, have received very little notice.

Until now. Spurred in part by the Rodney King riots last year, apparent redlining by insurers is capturing the attention of state insurance regulators and, more important, the U. S. Congress. The result could be the first step toward legislative reform. "It's a critical issue that deals with our institutional barriers toward poor people and people of color," states Representative Joseph P. Kennedy II (D-Mass.), cosponsor of a bill to investigate redlining charges.

HIGH CRIME? Critics say that in certain urban areas, insurers either refuse to write coverage or sell only more restrictive policies because of a region's racial makeup, rather than basing the decision on individual risks. Industry representatives say that redlining is not a general practice. With no solid nationwide data, it has been hard to settle the issue. But now, two members of Congress are racing to draft bills that would mandate federal data collection. And in what it terms a "significant new initiative," the Housing & Urban Development Dept. is launching a major probe of redlining.

State insurance commissioners are taking steps to combat redlining. On July 8, California's John Garamendi charged Monterey-based California Insurance Group with more than 250 counts of redlining. According to the complaint, the company prepared a highlighted street map "clearly identifying areas of the city of San Francisco predominantly inhabited by minorities, gays, and people with low incomes" for use as an underwriting guide.

Consumer groups are waging aggressive campaigns. A study by the Association of Community Organizations for Reform Now, or ACORN, found that "the level of coverage . . . in low-income and minority neighborhoods remains substantially below that of high-income and white neighborhoods." Housing units in minority areas were less likely to be covered than those in white areas of comparable income levels, said ACORN, and the quality of policies tended to be lower.

A recent study of six major cities sponsored by the American Insurance Assn., by contrast, says more than 98% of homeowners have home insurance. Each group says the other's study is flawed. Although the AIA admits coverage in urban areas is more costly, it attributes this not to discrimination but to high crime rates and the fire hazards of row houses.

Two congressional committees want the federal government to collect data. The House Banking Committee's subcommittee on consumer credit and insurance, chaired by Kennedy, is working on a bill to make the Federal Insurance Administration a separate agency that would license foreign insurers and gather data on the sale of insurance. And the House Committee on Energy & Commerce's subcommittee on commerce, consumer protection, and competitiveness, chaired by Representative Cardiss Collins (D-Ill.), is drafting a bill that would require annual disclosure of "insurance practices and activities in large urban areas" by large insurers.

Some in the industry are suspicious of the legislators' motives. "Long-term there will be attempts to mandate some sort of community-reinvestment requirement on insurers like the banks have," says David Farmer of the Washington (D. C.)-based Alliance of American Insurers. Says Kennedy: "The desire is simply to get a handle on what's happening in terms of discrimination."

Despite the insurers' denials, the suddenly intense spotlight on their underwriting practices makes one thing quite clear: If the industry doesn't take the initiative, regulators will.

By Suzanne Woolley in New York

DO INSURERS DISCRIMINATE?

CHARGE	Insurers discriminate against poor and minority homeowners by denying coverage in certain areas without regard to individual risk factors	Insurers restrict marketing by not locating agents in minority neighborhoods and not hiring minority agents	When minority applicants in urban areas get policy quotes, premiums may be higher and policies may cover less
RESPONSE	Insurers deny race is an issue and claim redlining is not condoned	Agent location does not necessarily indicate where they do business—and the industry is trying to recruit more minority agents	Policies with higher costs and restrictions are caused by such factors as high crime rates, not racism

DATA BUSINESS WEEK

1992 ACTIVITIES AND RESULTS

Consolidated results for the Framatome Group were 12.7 billion Francs in 1992, compared to 14.2 billion Francs the year before. In fact, the billing for a single nuclear power unit, Penly 2 was partly offset by the integration of new nuclear fuel companies. With a consolidated net profit, Group share being 950 million Francs, overall profitability was at the same level as 1991.

Over the past year the key event in Group development was the takeover of French nuclear fuel production companies, the Péchiney subsidiaries F.B.F.C., Zircotube and CERCA, on September 15, 1992. On the same day, Framatome became the majority shareholder of an American company, B.W.F.C., which is also specialized in the production of fuels for pressurized water reactors. These acquisitions confirm Framatome's major role in the French nuclear industry.

Another important event that took place in the closing days of 1992 was the acquisition of Daut and Rietz by Framatome Connectors International, a 100% Framatome subsidiary. The core business of Daut and Rietz is focused on the automobile industry, essentially in Germany and Austria. This move strengthens the Group's already significant activity on this market.

NUCLEAR PROJECTS

Nuclear Steam Supply System business was marked by the delivery of the N° 2 nuclear power unit at Penly. Construction works proceeded on schedule in France and in China at Daya Bay, where first criticality for the N° 1 nuclear power unit is planned for July 1993. Winning the order for the second nuclear power unit at Civaux, 18 months after the first, reinforced this activity. Finally, the engineering work on the European Pressurized Reactor (EPR) project, which is being carried out with Siemens and managed by N.P.I. (Nuclear Power International), went ahead in cooperation with E.D.F. and German electrical utilities.

Nuclear Services business was sustained in France and internationally. Significant orders were obtained in 1992, especially in France with the orders for replacement of steam generators for Bugey 5, and in Spain and Sweden in cooperation with Siemens.

In the Nuclear Fuel sector, major sales successes were achieved on the export market, especially in Germany, while in France, a three-year refueling contract for 1993 to 1995 was signed with E.D.F.

NUCLEAR FUEL PRODUCTION

F.B.F.C. and Zircotube, the two leading companies producing nuclear fuels for pressurized water reactors, are now fully integrated into the Framatome Group. Their sales for 1992 were excellent and they used their production facilities to full capacity.

INDUSTRIAL EQUIPMENT

The fall-off in productive investments and reductions in military programs penalized the industrial equipment market.

The Mechanical Engineering sector registered orders for replacement steam generators in Spain and Sweden. On the other hand, business in the field of peripheral equipment and specialized machines did not permit maintenance of full employment in some subsidiaries, notably N.F.M. and ATEA.

In the **Oil-Gas** business, where the Thermodyn division and the Packinox and Proser subsidiaries operate, significant sales were chalked up on the export market, especially for Thermodyn compressors.

CONNECTORS SEGMENT

Consolidated results for Framatome Connectors International remained stable at 3 billion Francs in spite of the dollar's fall on exchange markets.

In 1992, F.C.I. integrated SCHMID into its organization and took over DAUT and RIETZ at the end of the year. This supplemented its facilities for penetration of the automobile connectors market.

F.C.I.'s development drive also targeted the telecommunications market whose prospects remain very positive. In this field, F.C.I. recently added to its industrial capacity in Europe by purchasing the production activities of the Pontarlier plant that were formerly operated by an Alcatel Group subsidiary.

However, weak economic growth and global cuts in military programs resulted in sales volume stagnation and price reductions due to fierce competition. These factors affected the operating profit.

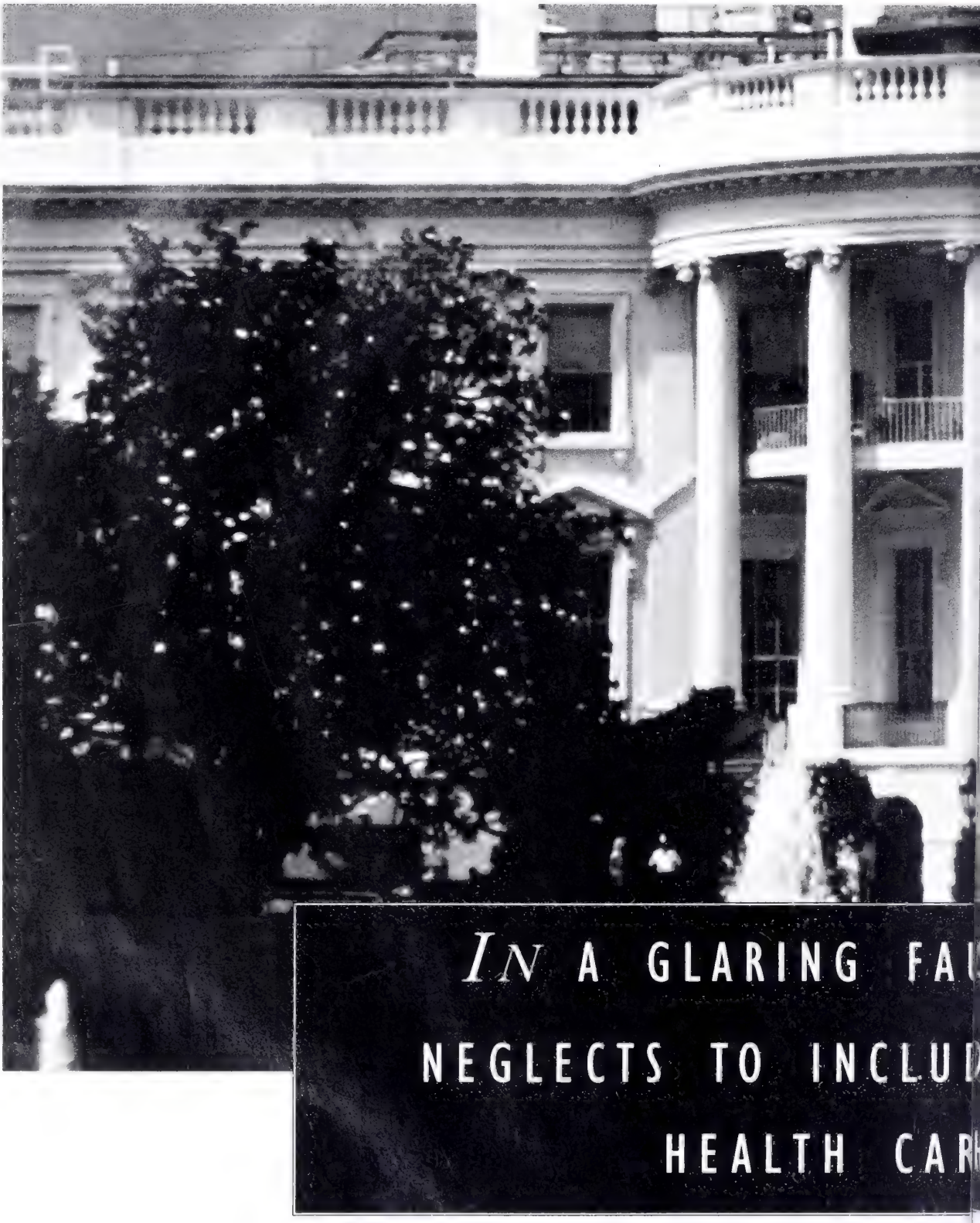
Jean-Claude Leny
Chairman and Chief Executive Officer

CONSOLIDATED RESULTS

I - GROUP ACTIVITY	1992	1991
Consolidated Group Revenues (excl. taxes) (millions of FF)	12,668	14,174
of which : - **Nuclear**	8,009 63.2%	9,312 65.7%

II - GROUP NET INCOME AND DISTRIBUTION	1992	1991
Group share of net income (millions of FF)	950	986
Percentage of revenues	7.5%	7.0%
Number of shares outstanding (millions)	10.2	10.2
Net income per share (in FF)	93.1	96.7
Dividend per share	46.50	39.20

FRAMATOME



IN A GLARING FA
NEGLECTS TO INCLU
HEALTH CAR

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BusinessWeek

Beyond news. Intelligence.

BY GENE G. MARCIAL

THIS MEDICAL IMAGER MAY GET THE ALL-CLEAR

Molecular Biosystems has had its ups and downs in the past year, thanks to the Food & Drug Administration. But the Big Board-listed stock has been climbing since mid-April, from 16 to 22. And some smart-money investors think the stock is destined to trek higher.

These pros are betting that Molecular Biosystems, considered a leader in the development of contrast agents for medical imaging, including ultrasound scanning, will finally get FDA approval to market its flagship product, Albunex, in the U. S. this fall. Japan is expected to approve it soon, too. Europe's nod may come by mid-1994.

Administered intravenously, Albunex creates a contrasting effect between blood and surrounding tissues, which enhances the ability of ultrasound to pick up subtle differences in the density of targeted tissues.

"It's likely that Albunex will achieve a 25% market share in its first year of sales and hit 60% by the third year, generating sales by then of $100 million," says Albert Schmeidler, portfolio manager at A. R. Schmeidler, a New York investment firm. And he thinks foreign sales could be twice that figure. No contrast agent with transpulmonary capabilities for ultrasound imaging is available now, he notes.

ONE LAST LOOK. Molecular's shares got a big lift in July of last year, when an FDA panel gave Albunex a unanimous recommendation for use in cardiac ultrasound imaging. But last November, the stock plummeted after the FDA asked for additional information. Molecular believes it has now submitted all the required data.

Once approved, Albunex will be marketed worldwide by Molecular's partners, including Imcera Group's Mallinckrodt Medical unit, which will distribute Albunex in the U. S.; Shionogi in Japan; and Hafslund Nycomed for Europe, Africa, India, and the Middle East. These three partners have paid Molecular a combined $20 million for the marketing rights, plus the promise of an additional $53 million over the next few years, contingent on Albunex' development and regulatory approvals. That excludes royalty fees when Albunex is marketed.

MOLECULAR BIOSYSTEMS: READY FOR ANOTHER JUMP

DATA BRIDGE INFORMATION SYSTEMS INC.

"We could see Albunex sales growing from $3.7 million in 1993 to more than $250 million by the fiscal year ending Mar. 31, 1997," says Schmeidler. Molecular has yet to make money, but Schmeidler thinks it will be modestly profitable by 1994. From then on, he figures, sales and earnings growth will be rapid. But Schmeidler is reluctant to make specific earnings projections for subsequent years.

FRENCH FRIES THAT SMELL LIKE MONEY

You probably haven't heard of Harvard International Technologies. No, it isn't associated with that famous university in Cambridge, Mass. The Vancouver-based company is obscure even in Canada. But its chief product, a French-fry vending machine, has the stock sizzling—up from 3¾ in mid-June to 7½.

What gives? For one thing, a reputable ex-partner of Goldman Sachs has bought $5 million worth of the NASDAQ-traded shares. This pro says the vending machine, called Spud Stop, works—and that the French fries it makes in cholesterol-free, 100% vegetable oil are dispensed in just 50 seconds. The taste? "Excellent," he says.

Other big investors, such as Mario Gabelli and Canada's Sam Belzberg, have taken chunks of the stock. Plus, Harvard's executives are moneyed and experienced, including President and CEO Edgar Kaiser Jr., son of the founder of Kaiser Resources, who owns 18%; former Canadian Prime Minister John Turner, who is chairman; and Neil Balter, founder of the San Francisco-based California Closet chain, who's president of Harvard's marketing arm, Harvard Capital.

"This is now beyond being a startup, with a real product and a great future," says the former Goldman Sachs partner, who thinks the stock is a steal considering its prospects. Another New York money manager who has snapped up shares says the stock is an "easy double" once the company starts signing big contracts. The first came on June 29, with Pafrit in Madrid, for a 10-year "master license contract" covering Spain and Portugal, with a minimum value of $82.5 million. The Spud Stop machines are made by a 20%-owned joint venture in South Korea.

A TRUCKER REROUTES AND REVS UP

It isn't surprising that trucking stocks haven't been exactly racing, considering the economy's lack of zip. But J. B. Hunt Transport Services has been picking up speed of late.

Business isn't necessarily surging. What's fueling Hunt and its stock, up to 20¼ on July 6 from 16 in mid-April, is its entry into containerized intermodal transportation. That means that instead of hauling cargo cross-country by truck, the company is transporting it in huge containers that fit on railcars. The idea isn't new, but Hunt wants to become an industry leader.

The company has an agreement with Santa Fe Pacific to move Hunt's containers across the U. S. by rail. Hunt delivers them to the rail terminals and picks them up at the other end for delivery to their final destinations. This cuts driver turnover, since employees no longer drive long routes. It also reduces the number of highway accidents that Hunt trucks are involved in. "As Hunt becomes a dominant containerized intermodal player by mid-1994, its margins and earnings should exceed its fast revenue growth," says Tony Hatch, an analyst at PaineWebber Group. He says intermodal will account for half of Hunt's revenues by 1995, up from 30% currently.

Trevor Stewart Burton & Jacobsen, which shepherds $800 million, has been buying, noting that it expects Hunt to outperform the market over the next three years. Alan Kral, a portfolio manager at Trevor, sees the stock hitting the 30s over the next 12 to 18 months. He figures Hunt will earn $1.10 a share this year and $1.30 to $1.40 next year, vs. last year's $1.03.

"A great time to introduce a new luxury cruise line. The economy was in a slump, and the competition was on the rise.

"Increasing our ad budget was so successful, our agency recommended we cut it."

We told our new advertising agency we have to go in with all guns blazing. And gave them the extra money to do it.

They recommended a three phase campaign. Phase 1. Full page newspaper. One ad a week for 24 weeks and one-third pages in the travel section. Phase 2, radio. Then 3, television to sweep up one season and sow the seeds for the next.

To make a long story short, two-thirds into the newspaper phase, Celebrity's ships were just about full to the end of the season. With so little left to sell, we all agreed to hold the radio and TV and save the remainder of the budget.

In roughly two years Celebrity became the number one cruise line from New York to Bermuda.

We've just added another new luxury ship and we're anxious to fill it. So once again we've upped our budget. So far, our agency hasn't tried to talk us out of it."

Al Wallack, Sr. VP Marketing, Celebrity Cruises, after returning from having his hearing checked.

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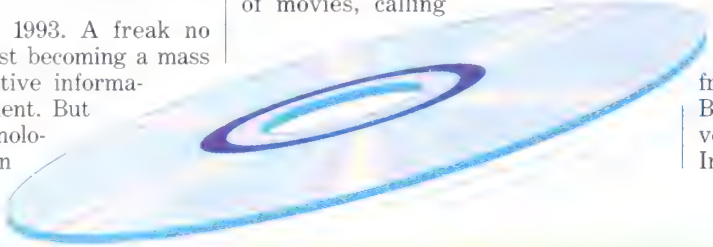
SOFTWARE

CD-ROM: A MASS MEDIUM AT LAST

Sales are $3 billion and rising—but in unexpected areas

In the early 1980s, engineers at Philips in the Netherlands and Sony Corp. in Japan had a similar idea: What if the compact disks that the two giants had invented for sound recordings could be used for computer-data storage? As it turned out, a CD could hold the equivalent of more than 1,000 floppy disks. By 1986, soon after the two companies introduced the CD-ROM format, Microsoft Corp. started an annual conference to drum up interest among software makers. But despite a wave of industry excitement over the technology, computer buyers ignored it. Says one analyst: "For a long time, it was freakish how low the sales volumes were."

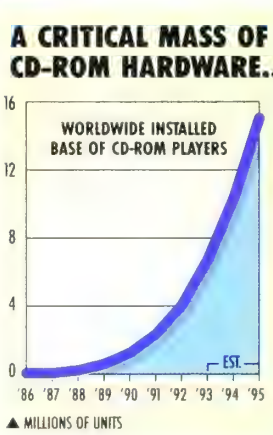
Skip forward to 1993. A freak no longer, CD-ROM is fast becoming a mass medium for interactive information and entertainment. But like many new technologies, it's catching on in a way that wasn't envisioned by its inventors. "Digital data storage was supposed to be the attraction," says Emiel N. Petrone, a senior vice-president at the U. S. subsidiary of Philips. "The phrase 'interactive multimedia' was not used until much later." Early on, computer makers figured that CD-ROM (ROM stands for read-only memory) would be good for storing data bases, documents, directories, and other archival information that would not need to be altered. Customers would be libraries and businesses.



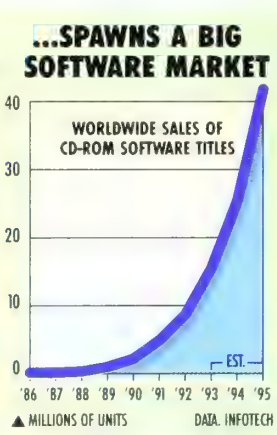
SCRAMBLE. Today, the growth in CD-ROM is coming from interactive programming—such things as multimedia encyclopedias, live-action games, and troves of educational material. By now, nearly every maker of personal computers sells machines with built-in CD-ROM drives, which typically add $300 or more to a computer's price. That has helped boost worldwide installations of such drives to more than 5 million, according to InfoTech, a market researcher based in Woodstock, Vt. (chart). And with more than 7,000 titles to choose from, businesses and consumers will buy some 15 million disks this year, largely at prices ranging from $30 to $100. All told, CD-ROM software amounts to a more than $3 billion business, growing at more than 40% annually, according to InfoTech.

Such growth has set off a scramble among software makers and media giants who want to figure out the new medium. The trick, it seems, is to offer something that people can't quite get from reading or watching TV. For instance, Microsoft's *Cinemania* allows film buffs to search through a catalog of information on decades of movies, calling up reviews as well as stills and sound bites from, say, *Singin' in the Rain* before going out to rent a videocassette. Other top-10 titles (table) include *Street Atlas U. S. A.*, which allows travelers to plan trips using full-color maps of every street in every U. S. town.

A CRITICAL MASS OF CD-ROM HARDWARE...



...SPAWNS A BIG SOFTWARE MARKET



But most CD-ROM titles don't take advantage of all the medium has to offer. A typical title, *Monarc Notes*, merely summarizes th plots, themes, and character from 1,000 literary works and let the user search through it by key word. "We're still in the equivalen of the silent-movies stage," say Thomas R. McGrew, a vice president at Compton's New Media Inc., a Carlsbad (Calif company that distributes abou 40% of all retail CD-ROM disks One idea for interesting intera tion is to have a character act as guide, as in *The Human Calculator*, new Compton's title that features an a imated expert who will help kids wor through math problems. Another, *Th Lifestyles of the Rich & Famous Coo book*, has TV personality Robin Leac and various celebrities popping up t introduce exotic recipes.

All this experimentatio is expensive. That's wh some of the leading CD ROM software startups a looking for business par ners with deep pocket Large media companie are emerging as the lik liest suitors. Chicago med conglomerate Tribune Co. o July 6 announced plans for acquirin Compton's NewMedia for $57 millio from its current parent, Encyclopaed Britannica Inc. Another recent deal i volves media giant Viacom Internation Inc. It has acquired ICOM Simulatio Inc., a maker of interactive CD-RO adventure games. V acom is also plannin CD-ROM titles usin characters from T shows running on i MTV and Nickelode cable networks.

LONG ROAD. Oth media mavens, hov ever, regard CD-RO as a warm-up for t real thing: a fully di ital nationwide ne work. That mediu the vast "informati superhighway," cou render the CD-RO obsolete. John C. M lone, CEO of Tele-Co munications Inc., America's largest ca company, has said that digital networ will one day give consumers "rando access to movies and virtually anythi that is currently on CD-ROMs." That, course, might be years away. Says D vid M. Arganbright, president of Groli Electronic Publishing Inc.: "The CD-R is here, and the superhighway isn't."

True, but then again, most consumers 't even have personal computers at ne. To reach the broad consumer rket, companies such as 3DO Corp., startup headed by computer-game repreneur Trip Hawkins and backed Time Warner, Matsushita, and AT&T, selling multimedia CD players that TVs as display screens. Philips has n marketing its CD-I system as a new m of family fun for the past two rs. The $499 system runs education- disks such as *A Visit to Sesame eet*, which allows kids using a remote

THE CD-ROM HIT PARADE

o-selling titles by U.S. retailers

Title/Developer	Description
SEVENTH GUEST Virgin Games	Live-action game
MPC WIZARD Aris Entertainment	Video and audio clips
COMPTON'S ENCYCLOPEDIA Compton's NewMedia	Education title
COREL ART SHOW Corel	Computer graphics catalog
KEY CLIPMASTER PRO Softkey	Illustrations library
CINEMANIA Microsoft	Multimedia movie catalog
STREET ATLAS U.S.A. Delorme	Road maps
KEY FONTS PRO Softkey	Typeface library
BATTLE CHESS Interplay	Animated board game
0 KINGS QUEST V Sierra On-Line	Fantasy game

DATA: PC DATA

trol to play alphabet games with Er- and Bert. But such CD-for-TV for- ts have yet to sell very well, partly ause consumers "don't quite under- nd yet what it is," admits Philips' rone.

So for now, at least, the personal com- er is the place for interactive multi- dia—even for such mass-market items electronic magazines. McGraw-Hill . has recently released a multimedia ie of the BUSINESS WEEK 1000 that udes financial data from the compa- s Standard & Poor's Corp. subsidi- . Meanwhile, Washington Post Co. launched a quarterly electronic edi- ı of *Newsweek*. But as is the case h just about everyone else involved CD-ROM, the *Newsweek* staff is still ing to figure out where their creation in. Says Michael Rogers, managing or of *Newsweek Interactive*: "We see ıs somewhere between a magazine television, with bits of radio thrown Perhaps we'll one day speak of this he golden age of CD-ROM.

By Evan I. Schwartz in New York

REMEMBER THE CELLULAR-PHONE SCARE?

Six months—and no studies—later, consumers' cancer anxiety has faded

It had all the makings of another great cancer scare, on a par with Red Dye No. 2: Cellular phones, the media screamed, might be causing brain tumors. The fear arose in January, after a Florida man filed a lawsuit claiming that his wife contracted a fatal brain cancer from heavy cellular-phone use. The worry soon mushroomed, becoming fodder for talk shows and office chatter nationwide. Sensing an opportunity, crafty inventors came up with contraptions to shield users' heads from the supposedly deadly antennas.

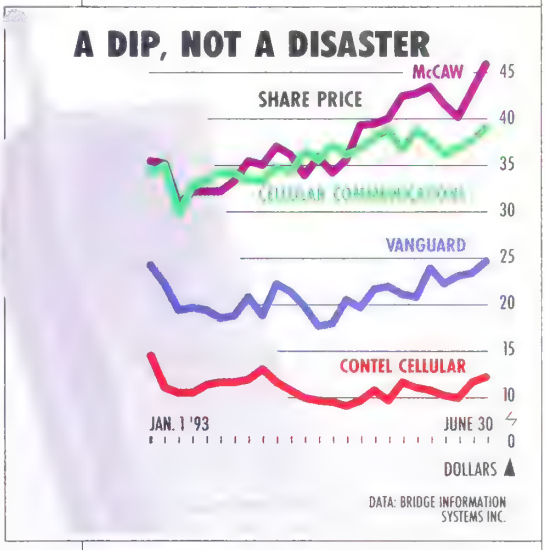
The cellular industry, in a series of news conferences and press releases, assured consumers that the yuppie gadgets were safe—but could not point to any scientific study to back it up conclusively. As the industry was hit with more suits alleging a health hazard, the stock prices of cellular companies plummeted (chart). It appeared that one of the 1980s' big growth industries was headed for trouble.

Six months later, the cancer scare is all but forgotten. Although there is still no scientific study to give cellular phones a clean bill of health, the industry is on target to grow more than 30% this year, matching last year's breathless pace. And cellular stocks have more than recovered. Paul Chellgren, president of Nokia Mobile Phones Inc., says some retailers reported a slight dip in sales for a week or so during the scare. But now, the second-largest maker of cellular phones expects its sales to grow 30% to 50% this year. Motorola Inc., the largest cellular-phone maker, sees "little or no interest from users" in health issues today, according to James Caile, vice-president for marketing at Motorola's cellular subscriber group.

SECOND COMING? What happened? "Consumers shrugged it off," says Thomas E. Wheeler, president of the Cellular Telecommunications Industry Assn. Wheeler thinks a lack of hard evidence for the cancer link, other than the circumstantial evidence cited in the lawsuits, meant the issue had a short life (even though none of the suits has yet been resolved). His group has promised to spend as much as $25 million for research into cellular safety over the next five years, which Wheeler says should allay any concerns that the issue might be swept under the rug.

But consumers aren't waiting around for the studies. Even when they have a chance to use a supposedly less risky car phone or a "luggable" model—whose antennas aren't next to the user's head—consumers are choosing the pocket-size versions. Nynex Corp. held a promotion in June in which customers got a free phone if they signed up for two years of cellular service: Given the choice of three models, most took the pocket one.

That doesn't mean the issue is dead. Craig O. McCaw, CEO of McCaw Cellular Communications Inc., the nation's largest wireless-phone system, says the cancer scare, like other public worries, could resurface. "That's why the industry is working hard to make sure the next time around it is prepared with clear and more newsworthy data," he says. He named the phone manufacturers' lack of scientific research as one reason the scare became front-page news in the first place.



So it seems the cellular industry has survived the first big threat to its breakneck growth. That's crucial, as the industry prepares to move to the next wave of wireless devices—such as "personal digital assistants" and cheaper, lighter pocket phones that can be used anywhere. The promised wireless future won't happen if consumers worry that it might be hazardous to their health.

By Bart Ziegler in New York, with Lois Therrien in Chicago

SIX ECONOMISTS WITH MORE THAN NUMBERS ON THEIR MINDS

A new band of specialists tackles the toughest problems, from poverty to privatization to pollution

The public has dismissed economists as irrelevant for decades. They had no solution to the high-inflation, slow-growth years of the 1970s. They were stumped by 20 years of poor productivity growth. They routinely missed major turns in the business cycle. And for almost two years now, they have been forecasting an economic rebound—alas, to no avail.

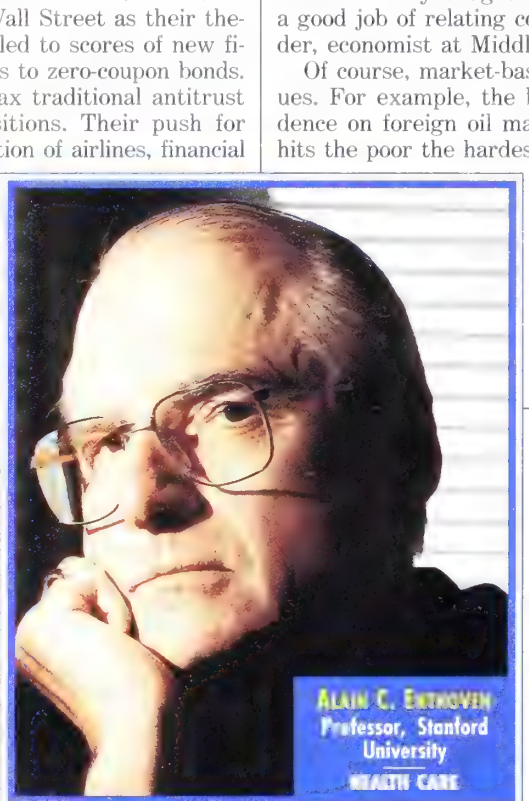
True enough. But the conventional view misses the powerful impact certain economists, especially microeconomists, have had in recent years on sector after sector of the U. S. economy. Economists revolutionized Wall Street as their theories about investments and markets led to scores of new financial products, from currency futures to zero-coupon bonds. They persuaded federal judges to relax traditional antitrust barriers against mergers and acquisitions. Their push for freer markets resulted in the deregulation of airlines, financial services, telecommunications, and trucking. Economists do make a difference.

The influence of economists is certain to grow in the years ahead. They are in strong demand overseas with communism's collapse and the move toward freer markets. They are critical to understanding how free trade will affect living standards. And microeconomists—exper in markets and incentives—are being called on by govern ment to solve society's toughest problems, from the enviro ment to health care.

Using economic incentives to attack social problems is sti highly controversial. But it has gained wider currency in re cent years. "The idea isn't anathema to liberals anymore says Robert N. Stavins, economist at Harvard University John F. Kennedy School of Government. With government constrained by budget deficits, "no other discipline does suc a good job of relating costs to benefits," says David C. Colar der, economist at Middlebury College.

Of course, market-based solutions can clash with other va ues. For example, the best way to reduce America's deper dence on foreign oil may be a 50¢ tax on gasoline, but tha hits the poor the hardest. The public is often unwilling to fo go fairness in order to increase eff ciency, so economists have to modif their ideas to take into account equ ty issues.

The ideas of six influential econo mists are discussed below. Hardl household names, they in one wa or another will affect the pocketbook of most Americans.



ALAIN C. ENTHOVEN
Professor, Stanford University
HEALTH CARE

MANAGED COMPETITION'S DAD

Alain C. Enthoven should be triumphant. When Bill Clinton seized on the health-care issue during the Presidential campaign, he assured moderate Democrats that he wasn't a typical big-government liberal by embracing "managed competition," the concept of using economic incentives to reign in soaring health-care costs. And Enthoven is the intellectual father of managed competition.

But Enthoven worries that the Clintons will use the aura of managed competition to sell a plan that is in fact more government regulation. He was disturbed at how many on Hillary Rodham Clinton's gargantuan task force on health-care reform favored bureaucratic mandates. Distrusting government, Enthoven puts his faith in markets.

Under Enthoven's version of managed competition, all employers would offer and contribute to a minimum health-benefits package for their workers. Anyone who wanted broader coverage than the minimum would pay more for it, and employees would pay taxes on any excess over the cheapest basic plan. New health-insurance purchasing cooperatives would pool the purchasing power of small businesses and individuals to contain costs. Health providers couldn't cherry-pick for healthy workers. Managed competition "makes people aware of what health care really costs so they can do something about it," he says.

Skeptics find Enthoven's manage competition a grab bag of ideas to complicated ever to work. To some only a government-run single-paye system like Canada's will delive quality patient care at a lower cost

"WHIZ KID." Enthoven's distrust o government management goes bac almost 30 years. A Massachusett Institute of Technology PhD, he pu in a stint at the Rand Corp. thin tank before becoming one of Rober S. McNamara's "whiz kids" at th Pentagon back in the early 1960s Enthoven's aversion to a govern ment-dominated health-care system wa forged during those years at the De fense Dept. "I learned that the idea weapon system is built in 435 congres sional districts, and it didn't matte whether it worked," he says.

Tired after years of doing defens analysis, Enthoven left the Defens Dept. in the late 1960s to head up th medical-products division of Litton In dustries Inc. His interest in health car whetted, Enthoven went to Stanfor University in 1973 to begin "the nex

ıse of my life": immers- himself in the intricate 'kings of the health-care rketplace. "I don't know ıny other academic who had a bigger influence," s Deborah Steelman, a ɔublican party health viser. "He changed the ndations of the health- e debate."

Since the mid-'70s, Enven has played a critical e in the Jackson Hole ɔup, a gathering of lth-care experts and instry executives at the oming ski-town home of ıl Ellwood, his friend the nation's other lead- managed-care advocate. hough Clinton is far n making up his mind r how to reform the 0 billion health-care rket, this much is certain: Some form Enthoven's managed-competition idea l be part of it.

By Christopher Farrell in New York

REVISIONIST N RECESSIONS

or years, macroeconomists were able to point to one clear-cut achievement: taming of the business cycle. Acding to the official numbers, recesns in the postwar era were far shortand less vicious than they were in lier downturns. Policymakers, it med, had learned how to use fiscal l monetary policy to smooth out the s and downs of the U. S. economy.

But that comforting asnption has been explodby Christina D. Romer, economic historian. mer has argued that resions in the postwar rs are no shorter than the earlier period. Corting for biases in the torical data, she showed t in fact the average gth of downturns beeen 1887 and 1917 was months, compared with 4 months in the period 8-90. What's more, ressions now are just as ep as they were before orld War I. Her work pports the notion that haven't gotten any bet- at stabilizing the econo-," says Peter Temin, an nomic historian at Mashusetts Institute of chnology.

CHRISTINA D. ROMER
Professor, University of California, Berkeley
ECONOMIC HISTORY

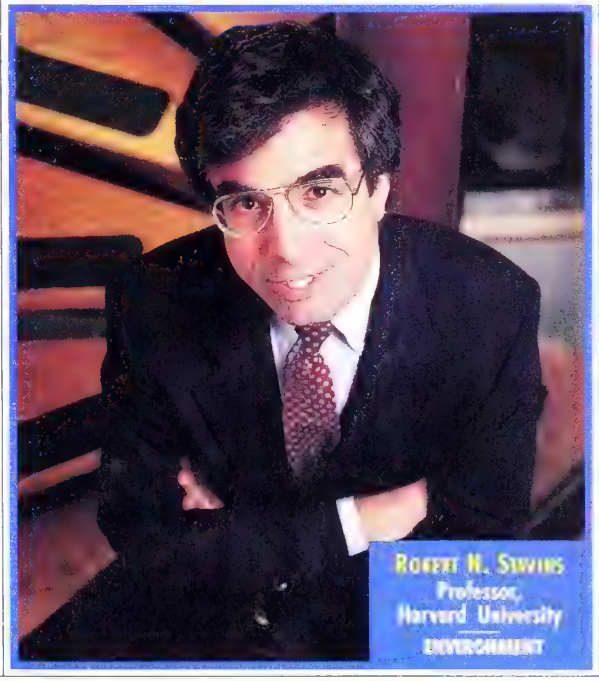
That pessimistic conclusion probably doesn't come as a surprise to recession-weary Americans, but it shocked many economists. And it put Romer into the middle of one of today's most contentious policy debates: Should government take an active role in stabilizing the economy? Conservative economists who oppose government intervention cite Romer's work approvingly, while economists who believe government can act effectively have been distressed. Says Romer: "The first time I presented this research at MIT in 1984, Franco Modigliani [the Nobel prize winner in 1985] stood up and said, 'I don't believe you, because if I did, I'd be very upset.'"

Romer sees this as a generational issue. "It's quite accepted by young people," says Romer. "I'm not going to convince the over-60 generation." Indeed, Romer is at the forefront of a new breed of young economic historians who are wielding history as a weapon in current policy debates.

STRANGE HERO. Romer's success made her a tenured professor at the University of California at Berkeley at age 31 and one of the very few tenured female economists at any major university. Now, she has turned her attention to monetary policy. Romer, who supported Clinton in 1992, is against using fiscal stimulus to pull the economy out of recessions. History, she says, shows that monetary policy is a more effective tool but that it hasn't been used to stabilize the economy. Indeed, she notes, most recent recessions have been deliberately caused by the Fed. "Paul Volcker's a hero," she muses. "I find that quite peculiar."

Romer may be ready to stir up more controversy soon. Every August, the Federal Reserve has a prestigious conference at Jackson Hole, Wyo., attended by Alan Greenspan and other top government officials, economists, and journalists. This year, Romer and her husband, David, also an economics professor at Berkeley, will present a paper arguing that almost every credit crunch in the postwar era has been caused by the Federal Reserve.

By Michael J. Mandel in New York



ROBERT N. STAVINS
Professor, Harvard University
ENVIRONMENT

MAKING THE U.S. LEAN, MEAN—AND GREEN

What price clean air? Pure water? Ancient trees? To many environmentalists, even the notion of a price tag is absurd. Yet the Environmental Protection Agency estimates the U. S. spends more than $130 billion annually just to comply with federal environmental laws and regulations.

A growing band of economists believe they have a better way to meet environmental goals—and at a cheaper cost: Use the markets. Forget traditional command-and-control regulations. Let companies trade pollution credits. Charge households more if they produce more trash. Raise gasoline taxes. "Give individuals and companies direct financial incentives to protect the environment," says Robert N. Stavins, a leading light among environmental economists.

Market-based regulations gained fans

(TOP TO BOTTOM) Photo by EDWARD ACKER; AMAN, "Photo by

DAVID T. ELLWOOD
Assistant Secretary, HHS
POVERTY AND WELFARE

with *Project 88*, a pioneering environmental policy report sponsored by then-Colorado Senator Timothy Wirth, now at the State Dept., and late Pennsylvania Senator John Heinz. Stavins was staff director of *Project 88*, and he later helped persuade the Bush Administration to adopt the idea of a tradable permit system to fight acid rain. The pollution permit system was incorporated into the 1990 Clean Air Act. Thus far, the new pollution market is getting off to a rough start. Even so, companies now have an added reason to lower emissions so they can sell their pollution permits to less-efficient companies. This gives companies an incentive to devise new pollution-control technologies. Stavins has been pushing similiar solutions, such as a carbon tax for reducing global warming, in articles published by the Progressive Policy Institute, the think tank for New Democrats.

A Peace Corps volunteer and an environmentalist before he got his PhD at Harvard University, Stavins is a rare breed indeed—credible with both economists and environmentalists.

By Christopher Farrell in New York

NOVEL PRESCRIPTIONS FOR AIDING THE POOR

Last summer, candidate Bill Clinton declared: "It's time to do away with welfare as we know it." Now, it's David T. Ellwood's unenviable task to make Clinton's pledge a reality. When he was an economist at Harvard University's John F. Kennedy School of Government, Ellwood supplied much of the intellectual firepower for Clinton's welfare plan. Now a top official at the Health & Human Services Dept., Ellwood is the head of the government task force charged with creating a new welfare program that can be sold to Congress and the public. Clinton has "given us a unique opportunity to change the system," he says.

Throughout his career, Ellwood has made a speciality of deflating the ideas about poverty held by liberals and conservatives alike. In his PhD dissertation, Ellwood showed that high unemployment in Chicago's housing projects wasn't brought on by the loss of industrial jobs, as most liberals believed.

But his later studies with fellow Harvard Professor Mary Jo Bane—now also at HHS—showed that welfare's availability didn't cause the rapid rise in out-of-wedlock births, as those on the right wanted to maintain. Increasingly, Ellwood has argued that the worst-off group in America is the working poor, who have neither the income sufficient to support a family nor the health benefits that are provided by the welfare system.

A TOTAL PACKAGE. In 1988, Ellwood switched from research to advocacy. In his book, *Poor Support*, he laid out four principles to guide a welfare overhaul. Work should pay enough to support a family. Child-support enforcement should ensure that both parents contribute to raising children. Welfare recipients should have access to job training—and, equally important, to jobs when the training period ends. If all these pieces are in place, benefits should be cut off after two years for recipients who are able to work.

In his campaign pledge, Clinton picked up those four points almost verbatim. But the last one—putting time limits on welfare—has become the shorthand for Clinton's program, which makes Ellwood squirm. Time limits won't work, he argues, if jobs aren't available or if work doesn't pay enough to lift a family out of poverty. "You can't loc at time limits without these other pie es," Ellwood explains. But even if h prescription requires the expensive cre tion of hundreds of thousands of ne government jobs—what critics refer t as welfare by another name—Ellwoc contends that work is still preferable t the dole.

Can Washington newcomer Ellwoc put his ideas into action? Conservativ researcher Lawrence Mead of New Yor University believes that Ellwood ha bitten off too much: "Hell will freez over before a Democratic Congress lir its benefits to two years," Mead con ments. And Clinton may already reco nize this political reality: The Presider seems to be softening his position c time limits. But Ellwood maintains tha widespread public disgust with welfar will propel an effort to build a syster that's a better reflection of the valu that Americans place on work, self-rel ance, and family.

By Mike McNamee in Washingto

PROOF THAT NAFTA IS NIFTY

When it comes to making econom analysis count for somethin Gary C. Hufbauer of the Institute f International Economics has two rule "Timing is everything," he says. "So simplicity." Maybe that's why Hufbauer work has become the standard in th controversy swirling about the Nort American Free Trade Agreement.

Hufbauer's timing couldn't have bee better. He and IIE research fellow Je frey J. Schott enjoyed unusual acces

two years to officials n Canada, Mexico, and U. S. negotiating the eement. That enabled m to rush into print th American Free de: Issues and Recom- ndations, just as NAFTA otiators were finishing year. Immediately, the 's numbers and results re being cited by ryone. Indeed, when International Trade nmission issued its luation of NAFTA in rch, they simply lifted bauer's estimates on job gains.

While Hufbauer backs accord, he is also quot- eagerly by NAFTA's . They note that while analysis predicts a net of 316,000 U. S. jobs 1995, he also says NAF- will displace 145,000 ex- ng U. S. workers. The ics also argue that Hufbauer's re- s assume that NAFTA will be part of roader Mexican economic package. political battles have stymied some orms. "Opponents seized on our num- s, thinking we weren't pessimistic ugh," says Hufbauer. And given the ent slowdown in Mexico's economy, ey're probably right."

RAH'S INFLUENCE. A former Fulbright olar in international economics, Huf- er also holds a law degree from orgetown University. He served as ector of the Treasury's International Staff during the Ford Administra- and later was named by President ter to be head of international trade and investment policy at Treasury. Since then, he says, the economic game has changed. "Trade policy used to be for a pretty elite crew. We'd write for a small core of people in government who had the same basic outlook and understanding," Hufbauer recalls. Now, trade issues such as NAFTA and U. S.-Japan relations are "TV talk-show issues."

Hufbauer is worried about NAFTA's future. He's dismayed by a federal court ruling requiring the Clinton Administration to produce an environmental-impact statement for NAFTA, a process he fears will delay the agreement and enable opponents to kill it. He hopes that the ruling will be reversed and that NAFTA will be passed. The benefits for the U. S., he says, are simply too great to let this opportunity slip through our hands.

By Douglas Harbrecht in Washington

PRIVATIZATION EXPERT AND CHEERLEADER

Some people have a knack for being in the right place with the right stuff. For Harvard University economist Andrei Shleifer, that moment came in late 1991 when he met Anatoly Chubais and Dmitri Vasiliyev, the chairman and deputy chairman, respectively, of the fledgling privatization committee known in Russia as GKI. The Russian-born Shleifer, a corporate finance expert, promptly joined GKI as an adviser—at a time when the task of privatizing thousands of state-owned shops and enterprises was considered a pipe dream.

But within a year, Chubais, Vasiliyev, and a team of economists and lawyers recruited by Shleifer turned privatization into the biggest success story of Russia's economic-reform program. Today, about 15% of Russian industry has been sold off, vouchers to buy company shares have been distributed, and private ownership is a reality. Top officials at GKI had the political savvy, ideological integrity, and sheer tenacity to fend off opposition and push the process along.

But an important measure of credit goes to Shleifer, who spent one week of each of the past 18 months working at GKI, cheerleading and contributing ideas. "He played an enormous role in developing the Russian model of privatization," says Vasiliyev. One of Shleifer's notions: to "bribe" workers, managers, officials, and others into favoring privatization by ensuring all a slice of the pie. The idea accords with the corporate-finance view that there are more "stakeholders" in communities than there are shareholders in enterprises. Massachusetts Institute of Technology economist James Poterba says Shleifer is "a model of an applied economist—thinking about the big questions of what economists should be doing, letting research influence practice and vice versa."

Shleifer emigrated from Russia with his parents in 1976 at age 15 and settled in Rochester, N.Y. As a Harvard undergraduate, he majored in mathematics, but crunching numbers for Harvard economist Lawrence H. Summers piqued his interest and he went on to get his PhD in economics at MIT in 1986. He taught briefly at Princeton University, moved to the University of Chicago's Graduate School of Business, then joined Harvard's faculty in 1991.

FUSILLADE. Shleifer has regularly debunked conventional views in finance and other fields. One recent paper he co-authored argued that changes in investor sentiment explain the discounts at which closed-end funds trade relative to their underlying shares—a challenge to "efficient market" theorists, who don't believe investor behavior affects stock prices. A fusillade in the June, 1993, *Journal of Finance* by Nobel laureate Merton H. Miller and others criticized it and advised Shleifer and his co-authors to go "back to the old drawing board."

Shleifer's work in Russia prompts him to conclude that "we, as economists, don't think straight about government and politics." So he's remedying that by developing a "theory of privatization" with GKI colleague Maxim Boycko and investigating such issues as the economics of corruption. Shleifer cheerily admits he likes to write "troublemaking" articles. But as an adviser to GKI, he has gotten new rewards: "I like to see markets helping people, and I get a thrill every time I see someone starting a business in Russia."

By Karen Pennar in New York, with Peter Galuszka in Moscow

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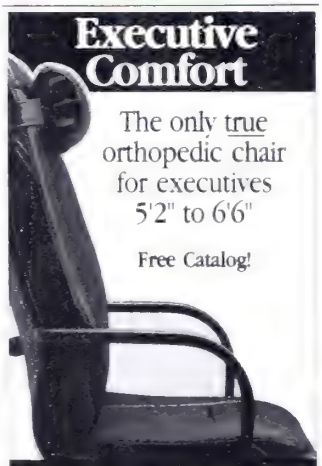

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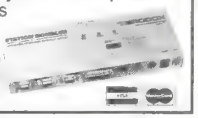

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Planning

SPECIAL NEST EGGS FOR DISABLED CHILDREN

Like many parents of disabled children, Martin Nachbar of Oceanside, N.Y., says his worst nightmare is that his son will become a homeless man, panhandling on the street, after he and his wife die. His only child, Paul, a 35-year-old magna cum laude graduate of Wesleyan University, is manic-depressive and lives in a group home. "He can get disassociated with things and wander off," says Nachbar, who knows families who have retrieved mentally ill children from police stations, hospitals, and the streets.

All parents must ask themselves: "Who will care for our child if something happens to us?" But for parents of disabled children, the question is particularly excruciating. Whether due to mental, physical, or developmental disability, their children will never grow up to be fully independent and must rely on help from their parents and others for their entire lives.

GETTING TO IT. As parents approach old age, they must plan carefully so their adult children will not fall through the ever-widening cracks in government-sponsored social-service programs. Supplemental Security Income (SSI) provides food, shelter, and clothing, and Medicaid offers health care. But parents are advocates for their children's rights, along with offering support and providing money for amenities. For Paul Nachbar, this includes weekly dinners out and vacations.

How best to provide for your child after you're gone? Leaving an inheritance is not the solution. The assets might disqualify a child from public funding, and all the money would go for expensive housing, medical care, and programs the government would otherwise pay for. "Instead of the money lasting their lifetime, within a half a year all of it will be gone," says Alan Kemp, who is trust director for the Indiana chapter of The Arc, a national organization for retarded persons.

The problem seems so insurmountable that parents often avoid necessary planning, says estate attorney Robert Freedman of New York. "There are a number of protections we can make," he says. "That isn't the problem. The problem is getting them to sit down and do it." For most parents of disabled adults, setting up a trust is the best way to provide funds to pay out-of-pocket expenses or to hire a social worker who will fulfill some of the parental advocacy roles. Known as Special Needs Trusts, these third-party arrangements allow parents to channel money for specific uses that do not conflict with government entitlement programs. Trusts must be drafted carefully by an estate lawyer so that the money is not directly available to the d abled adult, but administer through a trustee and stricted to uses that supp ment government services

Parents must analyze th child's needs to determi how much to fund the tru For example, schizophren may go through long peric where they lead normal liv and could use extra incon But for a severely retard person living in an instituti there may not be much p ents can do financially.

Parents can choose b tween an "inter vivos" tru

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trust costs $1,000 to
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Parents of disabled children
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OLED TRUSTS. Some parents
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These programs usually op-
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, usually around $30,000,
he death of the parents.
se programs are access-
to low-income people be-
se the trusts can be fund-
with proceeds from life
rance policies and pension
plans. A drawback is that they often require some or all of the remainder left in the trust at the beneficiary's death to stay in the pooled fund to serve other disabled people.

The Arc has programs in several states that will help a trustee, chosen by the family, administer the trust. In Indiana, the trustee just calls up the Arc's Alan Kemp to request funds. The Arc handles obtaining the money from the bank and filing appropriate forms with the government agencies. The minimum to enroll in the Indiana trust is $16,560 this year.

Parent organizations have also set up pooled trusts that provide ongoing social service and advocacy for disabled adults. The Planned Lifetime Assistance Network (PLAN), part of the National Alliance for the Mentally Ill, has pooled income funds in 10 states. These programs do not disburse funds, but the family can set up a separate Special Needs Trust and PLAN will act as an adviser to a bank trustee. In New York, the basic program includes one visit from a social worker per month over the lifetime of the disabled person. Each family must contribute a membership fee of $3,000, paid over four years, plus a pledge of at least $30,000.

Introduced last November, the UJA-Federation Community Trust for Disabled Adults fulfills both the financial-administration and personal-service and advocacy roles of a trustee. The UJA-Federation handles the financial management through its Planned Giving & Endowments Dept., while its network of social-service agencies provides a personal "advocate" for the beneficiary. A minimum of $10,000 is required to enroll, but parents are expected to provide a lump sum at their death adequate to provide for their child. If money remains in the trust after the beneficiary dies, one-quarter goes to UJA, one-quarter to the agency that provided the services, and half to the beneficiary of the family's choice.

DESPERATION. Some criticize charities for using the trusts as a fund-raising mechanism. But the organizations say they know firsthand how great the need for these programs is. Neal Myerberg, director of the Planned Giving & Endowments Dept. at UJA, says he created the trust after an elderly couple, distraught over the lack of options, killed their mentally ill son and then committed suicide. "I knew these people, I felt their desperation," says Myerberg. "We had to do something."

Many of the organizations that set up pooled trusts will also provide planning services, for a fee. Organizations recommend parents record every aspect of their involvement with their child for those who will fulfill their roles after their deaths. "Once the parents are gone, that information is gone," says Janice Derow, executive director of New York's PLAN.

No matter how difficult it is to face the idea that you will not be able to care for your child throughout his or her lifetime, or how problematic the options seem, it is far better to do something than nothing. "It is a difficult decision," says Nachbar, whose son Paul is enrolled in PLAN of New York. "But I have found it to be a tremendous relief." *Amey Stone*

CARING FOR YOUR OFFSPRING

SET UP A THIRD-PARTY TRUST so that assets you leave will not render your child ineligible for government entitlement programs.

CHOOSE A TRUSTEE, either by naming a family member or trusted friend or by creating a trust through a nonprofit group such as The Arc or the Planned Lifetime Assistance Network.

CHANGE BENEFICIARY FORMS so your pensions, IRAs, life-insurance policies, and other assets will go to the trust, not directly to your child.

OBTAIN INSURANCE FOR EXTRA SECURITY and to make sure you will have assets remaining in your estate to fund your child's trust. Buy long-term care, major medical, and catastrophic health-care coverage for yourself. Young couples can purchase life insurance to fund a trust.

PUT TOGETHER A "PERSONAL NEEDS NOTEBOOK" recording the various ways you have provided emotional and monetary support to your child. List everyone involved with your child including family members, friends, social workers, and advocacy groups.

DATA: BUSINESS WEEK

LONG-TERM SUPPORT FOR THE DISABLED

ORGANIZATION	SERVICES
THE ARC 800 433-5255	Administers finances of pooled trusts in about a dozen states for retarded clients. Minimum contribution varies by state.
NATIONAL ALLIANCE FOR THE MENTALLY ILL 800 950-6264	Provides support services in 10 states to members in a pooled trust under its Planned Lifetime Assistance Network (PLAN). Minimum contribution varies by state.
UJA-FEDERATION 212 836-1811	Offers a new pooled trust to provide both money management and support services. Minimum contribution: $10,000.
LIFE SERVICES FOR THE HANDICAPPED 212 532-6740	Sends social workers to family members of donors who give at least $50,000 to so-called restricted fund.

DATA: BUSINESS WEEK

Smart Money

PROFITABLE POCKETS IN THE WILD BLUE YONDER

For many investors, the simplest rule for approaching airline equities might be: Don't bother. The group has underperformed broad market averages over the long term. And $10 billion in losses for U.S. carriers since 1990 is not a record that inspires much confidence.

But investors shouldn't shun the entire group just because many are unreliable performers. Several airline stocks could deliver nice rewards for investors with patience. What's more, although most U.S. airlines aren't attractive as strategic buys, the extreme volatility of their stocks could deliver quick gains for those who can run ahead of the pack.

POISED FOR TAKEOFF. Some analysts consider USAir and KLM-Royal Dutch Airlines smart picks—for similar reasons. Their stocks are trading near historic lows, but both carriers have strong prospects for competing in the global marketplace.

USAir has dropped from 24 in February to around 16: It is now trading at the low end of its 10-year range. The airline is expected to post a small loss this year, but Michael Derchin of NatWest Securities forecasts earnings of $1.25 a share in 1994 and $2 to $3 by 1995, when the benefits of ties to powerhouse British Airways kick in. Once that happens, he thinks the price will move into the low 30s. Within four years, he pegs it as a 45 stock.

KLM is in a similar position. Its American depositary receipts have often traded in the mid-20s and have rarely fallen below the low teens. But at around 14, they are now approaching a historic low. The airline has been battered by fears that Northwest Airlines, in which KLM has a 49% stake, could file for bankruptcy. But the Dutch airline wrote off that investment in late 1992 and would not be materially affected. Meantime, it's likely KLM will reach an agreement with carriers in the European Quality Alliance to form a megacarrier with enormous clout. If this merger takes place, the stock could double within three years.

For daredevils, shares of United, American, and Delta could even provide opportunities. Fickle investors rush into those stocks as the airlines predict happy days but flee quickly when doubts develop. After initially upbeat reports, both stocks took a dive in May, when American's management said its second-quarter earnings would be disappointing. After a high of 72 in April, American recently traded in the low 60s. UAL Corp., from a high of 149 in May, has lost 17% of its value and now trades in the mid-120s. But for stockpickers who can keep abreast of industry conditions and take contrarian positions, there's money to be made. *Andrea Rothman*

ACROBATIC AIRLINE STOCKS

	Stock price July 6, 1993	13-week high	Low
AMR	61⅛	72⅞	60
DELTA AIR LINES	47¼	61¾	47⅛
KLM-ROYAL DUTCH AIRLINES	14⅜	16⅞	13⅜
UAL	125⅝	149¾	118
USAIR	15⅞	24⅜	15⅝

DATA BRIDGE INFORMATION SYSTEMS INC

Leisure

IN LONDON: MUCH ADO ABOUT SHAKESPEARE

For travelers seeking an alternative to the Broadway-bound shows in Britain, London is playing host this year to a dazzling array of Shakespeare performances. And a short ride away, the Royal Shakespeare Company (RSC) holds court in picturesque Stratford-upon-Avon.

Don't expect the dry Shakespeare of your classroom nightmares. Many theaters offer contemporary twists to the classic tales. At the Open Air Theatre in Regent's Park, *The Taming of the Shrew* unfolds to sounds of the circus. The production features a hoop-jumping horse (two actors in a horse suit), a tumbling acrobat, and a whip-bearing bridegroom prepared to subdue his new wife. The melodic poetry of *Romeo and Juliet* will likewise echo through the park until mid-September.

A sampling of London's repertory also includes an elaborate RSC production of *Antony and Cleopatra*, with towering sets of stone, at the Barbican Theatre. A fire-filled *Macbeth* appears at the Royal National's Olivier Theatre.

SKULL AND ROBES. Some 150 miles away, on the banks of the Avon, the RSC has an unusual take on *The Merchant of Venice*. Shylock and his adversaries perform in corporate attire, as computers blink and whir on a Wall S like set. The RSC in Str will also stage *King Le The Tempest*. If you're ing in London and wa catch either of these the RSC shuttle bus de for some evening perfor es at 1:30 in the after For the return trip, it Stratford 15 minutes aft final curtain ($32 round

Shakespeare fanatics be educated and entert at the Globe Museum in don, where Elizabethan and models are on di For a glimpse of poor Y skull or King Henry's of state, visit the Theatr seum in London and th lection Exhibition at ford's Swan Theatre. peek at Will's home Guide Friday's open-top ($9) meander through ford for a windy but view of five Shakespe properties, including the wright's birthplace.

To make RSC shuttle vations or to order th tickets before leaving U.S., call Edwards & wards at 800 366-48 Ticketmaster at 800 775 Ticket prices range about $9 to $59, but ba hunters should take Some theaters offer dis ed seats at midweek ma and for students and citizens one hour before time. *Rochelle S*

malaysia AIRLINES

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INFLIGHT
RESEARCH SERVICES

Inflight Research Services of London recently conducted a review of 31 airlines' First Class products and services. The final rankings and total percentage points are:

1.	**Malaysia Airlines**	62.3
2.	Singapore Airlines	60.0
3.	Japan Airlines	58.2
4.	Cathay Pacific	57.7
5.	KLM	56.8
6.	Swissair	56.3
6.	Thai Airways	56.3
8.	All Nippon Airways	54.9
8.	American Airlines	54.9
10.	South African Airways	53.8
10.	Qantas	53.8
10.	United Airlines	53.8
13.	Emirates	53.0
13.	British Airways	53.0
15.	Gulf Air	52.5
15.	Sabena	52.5
17.	Air France	50.8
18.	Kuwait Airways	50.4
19.	Air Lanka	50.0
19.	Delta Air Lines	50.0
19.	Korean Air	50.0
19.	Northwest Airlines	50.0
19.	TWA	50.0
24.	Philippine Airlines	48.8
24.	Pakistan International	48.8
26.	Iberia	48.0
27.	Turkish Airlines	47.5
28.	Alitalia	46.2
28.	China Airlines	46.2
30.	Garuda Indonesia	45.9
31.	Air India	45.2

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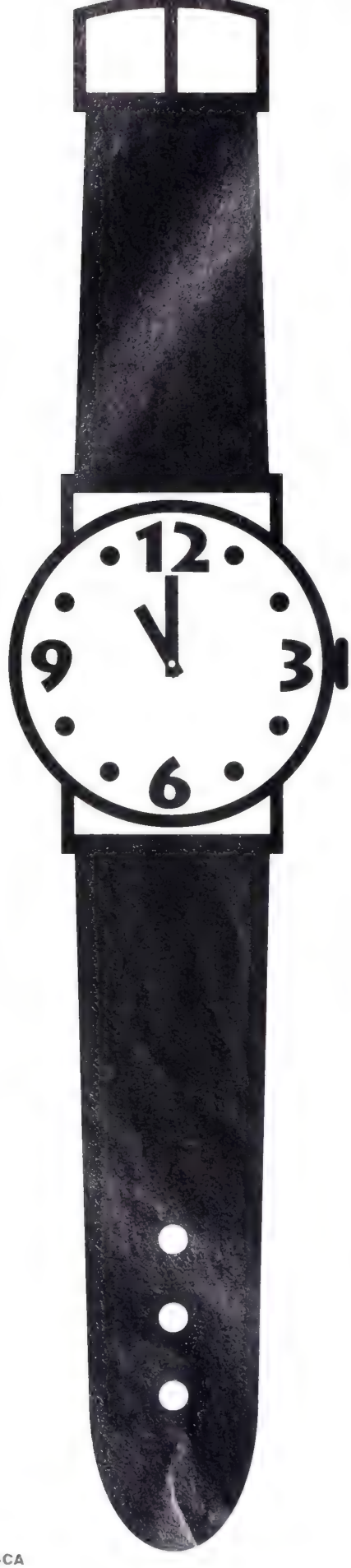

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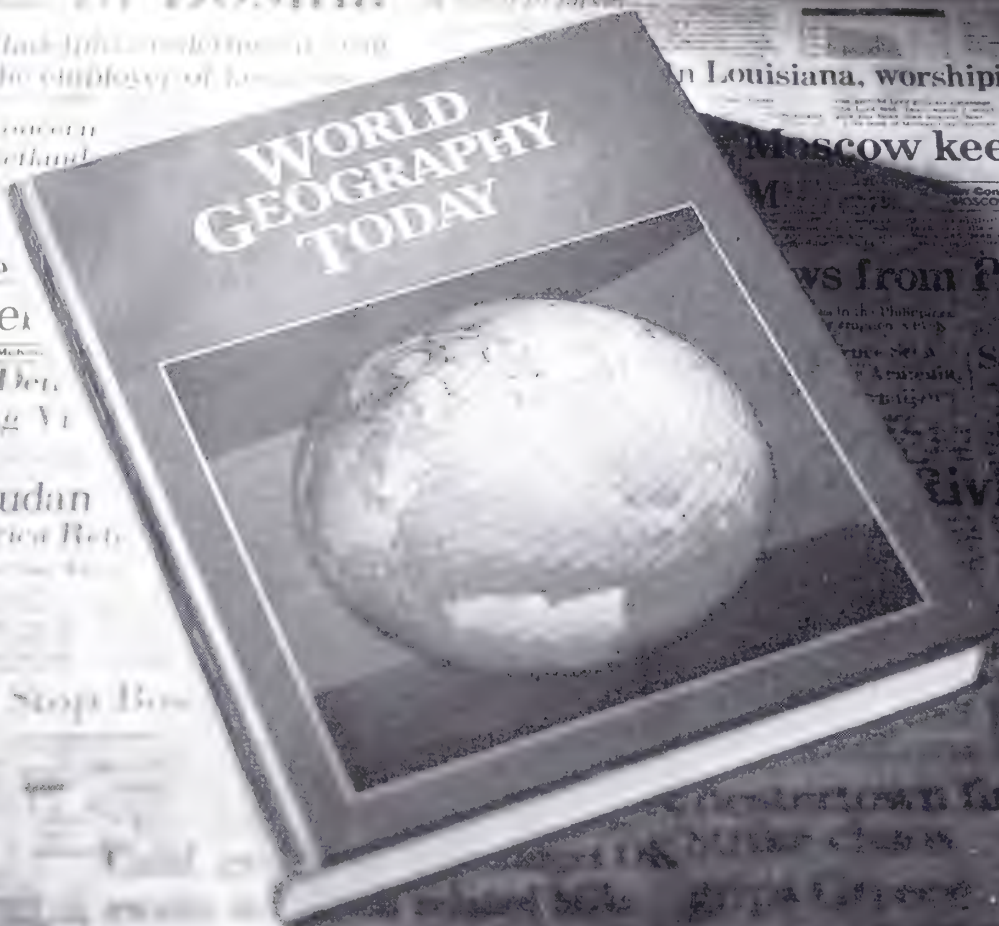

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92D-CA

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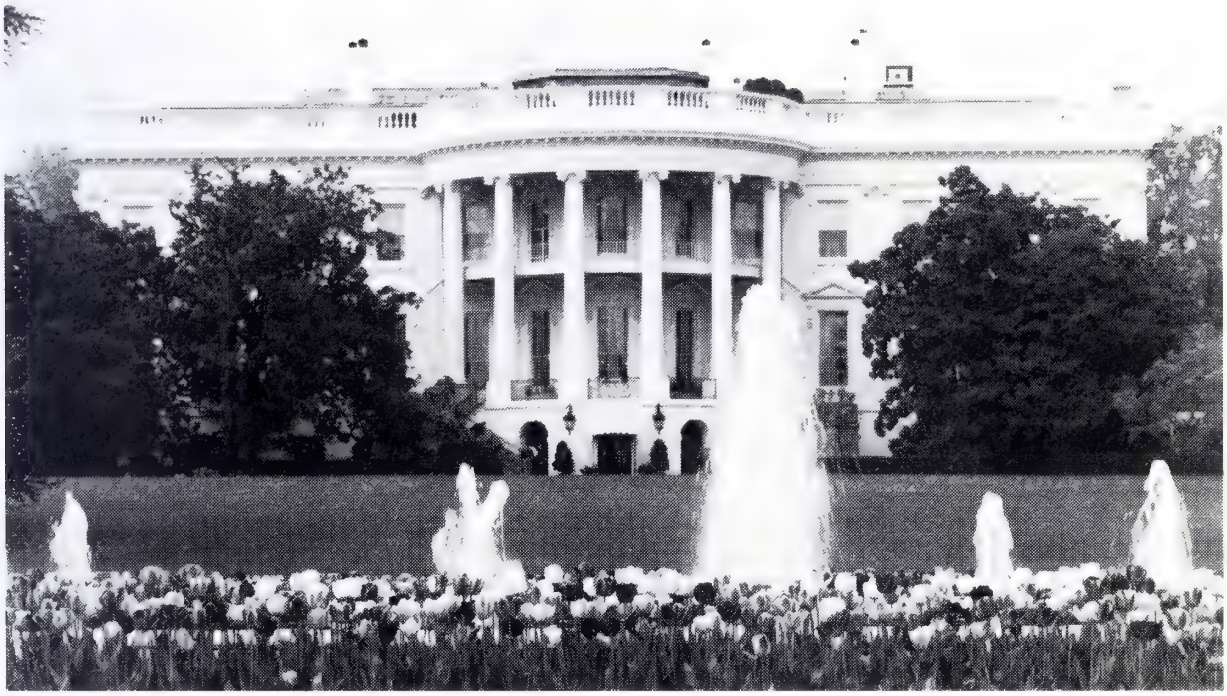

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THE WHITE HOUSE FELLOWSHIPS

92E-CA

It's taken politicians ten years to confront the AIDS epidemic.

It took musicians about 65 minutes.

The Federal government has been slow to confront the tragedy of AIDS. So, once again, KKSF and a group of dedicated musicians have taken things into their own hands. The result is the new KKSF *Sampler 3 for AIDS Relief*, in CD and cassette. Music by Bosè, Richard Burmer, Greenidge & Utley, Dave Grusin & Lee Ritenour, Hiroshima, Bob James & David Sanborn, Al Jarreau, Bernward Koch, Bonnie Raitt, David A. Stewart, Sting, Lauren Wood, Danny Wright and Yanni.

All net proceeds go to the San Francisco AIDS Foundation and other Bay Area AIDS organizations, to support people with AIDS and educate the community. So we can stop AIDS now.

92F-CA

dex to Companies

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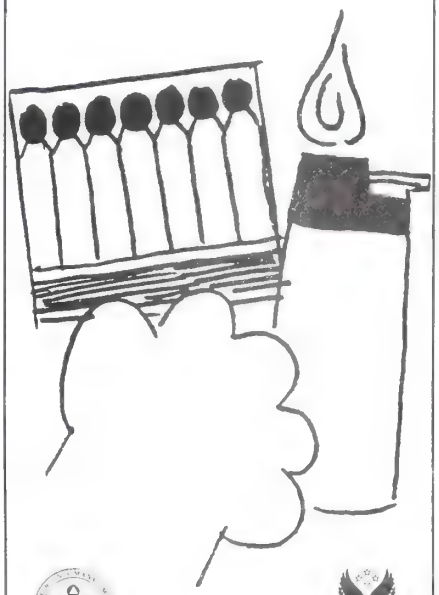
CURIOUS KIDS SET FIRES.

When a kid strikes a match, fire strikes back! Children don't realize that a simple flame can blaze out of control in mere minutes. That may be why nearly twenty-five percent of the fires that kill young children are started by children themselves playing with fire.

Don't let fire strike your family. Always keep matches and lighters far out of the reach of children.



A message from your local fire department, this publication, and the U.S. Fire Administration.

Asia & The New China—Where The Growth Is

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September 20 through 22, 1993

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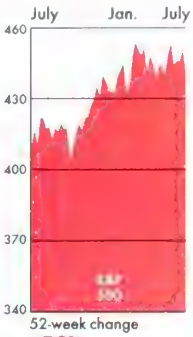
vestment Figures of the Week

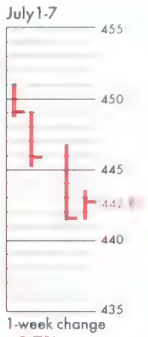
ENTARY

n talk hit the markets again ek. Gold shot up another nearly $400 an ounce. prices soared as heavy rains Midwest threatened this crops. Yet the bond market, sually plunges at the first inflation, kept steady. U.S. old off, as investors feared ws from second quarter eports. The damage was ed to larger companies— S&P 500 losing 1.7%, but sell 2000, a small-stock in- as barely touched.

STOCKS

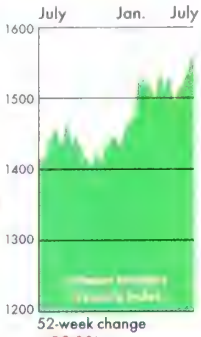


52-week change
+7.9%

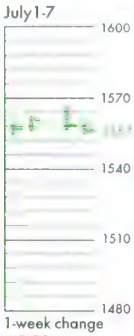


1-week change
−1.7%

BONDS

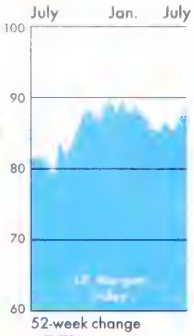


52-week change
+10.1%



1-week change
−0.1%

THE DOLLAR



52-week change
+7.7%

1-week change
+0.2%

RKET ANALYSIS

TOCKS	Latest	% change Week	52-week
ONES INDUSTRIALS	3475.7	−1.1	5.5
E COMPANIES (S&P MidCap Index)	166.7	−0.8	19.1
COMPANIES (Russell 2000)	233.2	−0.1	25.5
MPANIES (Russell 3000)	255.4	−1.4	10.9

GN STOCKS	Latest	% change (local currency) Week	52-week
N (FINANCIAL TIMES 100)	2848.3	−1.8	15.2
(NIKKEI INDEX)	19,720.7	0.7	18.8
TO (TSE COMPOSITE)	3972.7	0.2	16.2

FUNDAMENTALS	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.10%	3.09%	3.30%
30-YEAR TREASURY BOND YIELD	6.68%	6.67%	7.61%
S&P 500 DIVIDEND YIELD	2.84%	2.77%	3.07%
S&P 500 PRICE/EARNINGS RATIO	20.9	22.7	23.2

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 26-week moving average	444.4	444.0	Negative
Stocks above 26-week moving average	55.9%	55.4%	Negative
Speculative sentiment: Put/call ratio	0.44	0.37	Positive
Insider sentiment: Vickers sell/buy ratio	2.27	2.22	Neutral

USTRY GROUPS

BRIDGE INFORMATION SYSTEMS INC

WEEK LEADERS	% change 4-week	52-week	Strongest stock in group	% change 4-week	52-week	Price
PITAL MANAGEMENT	27.2	1.2	GALEN HEALTH CARE	37.5	60.4	19 1/4
D MINING	15.3	59.8	ECHO BAY MINES	20.7	122.0	13 7/8
IEY CENTER BANKS	11.3	19.1	FIRST CHICAGO	16.5	11.4	41 1/2
OR REGIONAL BANKS	11.2	19.2	FLEET FINANCIAL GROUP	18.6	12.6	33 1/2
UFACTURED HOUSING	9.4	33.1	FLEETWOOD ENTERPRISES	12.6	37.6	20 1/8

WEEK LAGGARDS	% change 4-week	52-week	Weakest stock in group	% change 4-week	52-week	Price
ES	−20.5	−3.8	GENESCO	−33.3	40.0	7
MUNICATIONS EQUIPMENT	−16.0	2.9	NORTHERN TELECOM	−26.6	−29.1	26 1/4
IALTY APPAREL RETAILERS	−14.7	−6.6	CHARMING SHOPPES	−22.2	−13.7	12 1/4
INES	−12.8	−2.9	USAIR GROUP	−26.6	23.3	15 7/8
EXPLORATION AND PRODUCTION	−12.2	22.4	MAXUS ENERGY	−13.4	51.1	8 7/8

TUAL FUNDS

MORNINGSTAR INC

RS ek total return	%
GRESSIVE AGGRESSIVE GROWTH	22.0
L MIDAS GOLD SHARES	16.9
ED SERVICES WORLD GOLD	14.8

k total return	%
NGTON STRATEGIC INVESTMENTS	94.5
G GROWTH	75.4
L MIDAS GOLD SHARES	67.8

LAGGARDS Four-week total return	%
DFA JAPANESE SMALL COMPANY	−8.8
CAPSTONE NIKKO JAPAN	−7.1
FIDELITY SELECT AIR TRANSPORTATION	−6.6

52-week total return	%
DFA CONTINENTAL SMALL COMPANY	−13.5
FINANCIAL STRATEGIC ENVIRONMENTAL	−13.5
FINANCIAL STRATEGIC HEALTH SCIENCES	−11.9

ATIVE PORTFOLIOS

DATA RESOURCES INC

amounts
ent the present
of $10,000
ed one year ago
n portfolio
tages indicate
y total returns

Foreign stocks	Treasury bonds	Gold	U.S. stocks	Money market fund
$12,327	$12,283	$11,253	$11,104	$10,235
+0.05%	−0.20%	+4.34%	−2.31%	+0.05%

on this page are as of market close Wednesday, July 7, 1993, unless otherwise indicated. groups include S&P 500 companies only; performance and share prices are as of market close July 6. Mutual fund returns are as of July 2. Relative portfolios are valued as of July 6. A more detailed explanation of this page is available on request.

TRADE: CELEBRATE SMALL VICTORIES

The spinmeisters turned the volume to high in describing the deal to cut tariffs on a slew of industrial products as a "breakthrough agreement" by members of the Group of Seven in Tokyo. Hype, to be sure. Still, the move was an important step in keeping the momentum going toward liberating world trade. We can only hope that the next steps—the really tough ones—are taken to open up markets for services and agricultural products as well.

It won't be easy, because it may require a major change in negotiating strategy. Agreements on manufactured goods can be reached simply on the basis of lower tariffs. But the ambitious agenda of lowering barriers to international trade in services requires more subtle negotiation. It is far more complex to reach market-opening agreements that cover intellectual-property rights, trade-related investments, insurance, finance, and construction. These difficulties have stalled agreement for years, as have efforts to cut agriculture subsidies, a politically sensitive issue facing governments.

Yet there is really no choice but to push forward with the talks. Growing world trade was a critical factor in the economic expansion of America, Europe, and Japan in the 1980s. It is no less important today. The world's largest economies are currently in the embrace of low-growth or no-growth domestic policies. Expectations of rising taxes, spending cuts, and real defense cutbacks are checking the U. S. economy. Japan, despite a large fiscal stimulus plan, is facing political turmoil and a strong yen. Germany is raising taxes and cutting social spending. China is tightening its runaway mo supply, and Italy, in the middle of a political scandal, is a facing big tax hikes.

In this environment, boosting international trade would the single most pervasive stimulus for the world econo possible. So it is time, perhaps, to begin declaring a ser of small victories, instead of rushing to almost certain f ure in the effort to reach one single, overarching agreeme Indeed, the industrial nations have given themselves an realistic year-end deadline to complete the current Urugu Round of talks of the General Agreement on Tariffs & Tra There is simply no way that such a comprehensive agr ment can be reached by that time, if ever.

There is a danger in banking on one huge deal. The agr ment in Tokyo to cut tariffs on pharmaceuticals, medi equipment, glass, electronics, paper, and other products conditional. Current rules call for the Tokyo cuts to be cluded in the larger GATT agreement that also covers ser es and agriculture and which may not happen for years.

It would be far better simply to go ahead with the d to cut tariffs on manufacturing that was made in Tokyo. T cuts would give a small kick to world trade and provid win in the trade game. If other agreements on specific m ket-access categories are possible in the months ahead, th too should be declared as victories as they are reached. Le go with what works. A continuous stream of small triump may be the more pragmatic approach to boosting world tra

HARVARD B-SCHOOL: TIME TO CHANGE

With the end of the cold war and the rise of new market economies in Europe, Asia, and Latin America, competitive pressures have never been fiercer, international markets have never been more important, and company work forces have never been as multiculturally diverse.

In adapting to this economic environment, U. S. corporations have begun replacing hierarchical organizations with flexible work teams and have dumped strictly domestic strategies for more global game plans.

But Harvard's world-famous business school has not kept up. It offers its students no programs abroad, and only 10% of its first-year case studies are international in scope. The increasing diversity of the people in the world of business is absent as well. Very few of the cases show women making decisions, a bizarre omission given that women-owned businesses in America now employ as many people as the top 500 corporations. Indeed, the faculty itself is pretty homogeneous. Harvard B-school has fewer tenured women on its faculty than other business schools.

Harvard doesn't do much to encourage teamwork, either. Its system of grading on a curve actually motivates students to work against one another. Moreover, there are very few group assignments that would build the skills needed to wo in diverse teams or to lead them.

The school is offering a few electives in entrepreneursh and a nongraded "module" in ethics. There are also so changes in its core human resources course to address issu in leadership. Despite small additions, however, what H vard is teaching today is essentially what it taught 30 yea ago. Little wonder that more than half of its graduates s go to work in investment banking and consulting.

This is a serious loss for American business. Harvard school still has a huge reputation and all the trappings success—famous professors, high enrollment, powerful alu It continues to attract some of the best and the brighte And its graduates continue to receive the highest starti salaries of any B-school.

But as these MBAs prepare to sally forth, they are bei trained to succeed in a world of the 1950s and 1960s, not t 1990s. Today's winning managers must be able to lead fl ible, diverse organizations through a never-ending series fast-moving, global economic encounters. Successful as t Harvard B-school is in so many ways, it doesn't appear be coaching tomorrow's winners. It is in danger of becomi a case study of an organization that was too slow to chan

ESS WEEK
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BusinessWeek

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HE HOME HOPPING REVOLUTION

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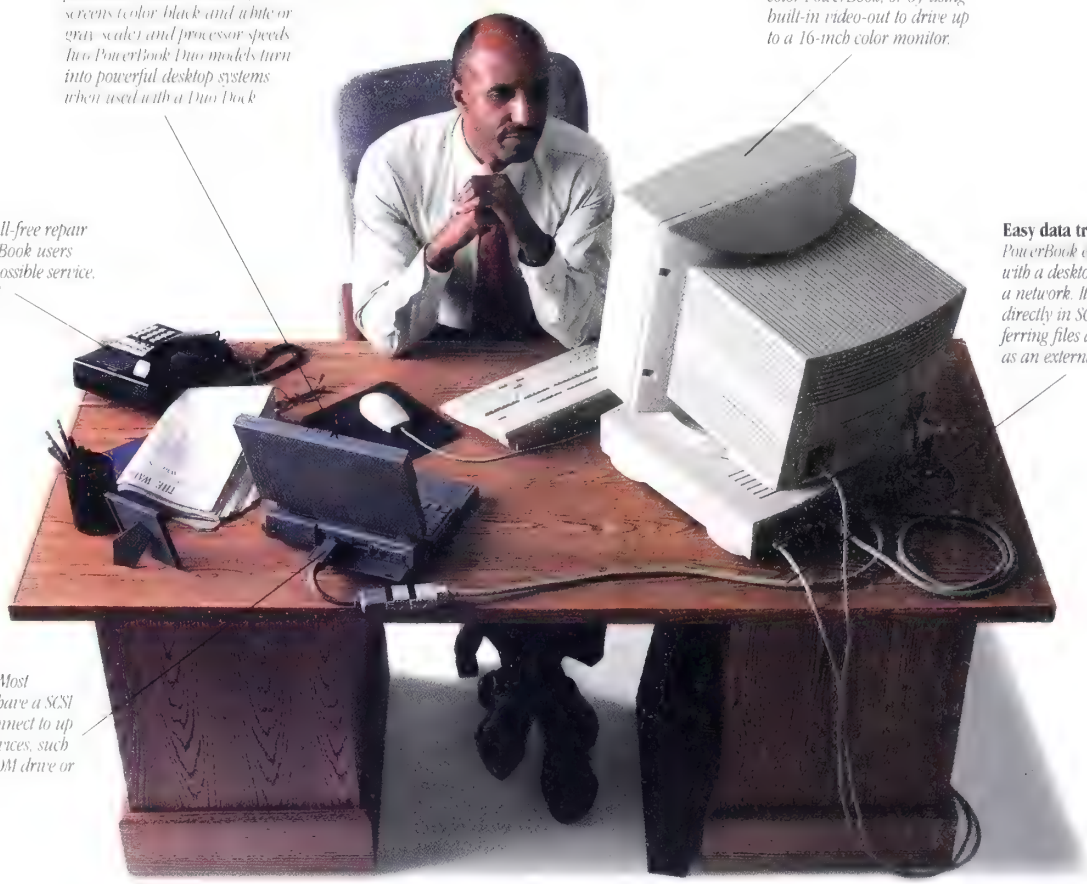
Why PowerBook is popular with people who use Macintosh.

Flexible choices. *Five all in one models with built in floppy drives provide a range of choices for screens (color, black and white or gray scale) and processor speeds. Two PowerBook Duo models turn into powerful desktop systems when used with a Duo Dock.*

Colorful possibilities. *Mobile presentations are easy with a color PowerBook, or by using built-in video-out to drive up to a 16-inch color monitor.*

Quick service. *A toll-free repair hotline gives PowerBook users access to the fastest possible service, anywhere in the U.S.*

Easy data transfer. *PowerBook easily shares fi with a desktop Macintosh c a network. It can also con directly in SCSI mode, tran ferring files almost as quic as an external hard disk.*



Fully expandable. *Most PowerBook models have a SCSI port that lets you connect to up to seven external devices, such as a scanner, CD-ROM drive or Ethernet interface.*

As people search for new ways to boost productivity outside the office, more and more are choosing Apple PowerBook™ computers. And not just because of the familiar benefits of the Apple Macintosh® system.

You see, unlike other notebook computers, PowerBook is designed for the way people work when they're away from their desks.

Beyond the office walls, they need to stay connected to their network for quick access to servers and e-mail, and PowerBook makes it easy. They need to make full-scale presentations, and PowerBook provides built-in support for color monitors, sound and QuickTime™ software-based movies. They need to be able to send and receive faxes, and PowerBook can make that simple as well.

In fact, with its award-winning design, PowerBook makes it easier to get any kind work done, anywhere.

Even people who need both portability a full expandability find a solution in PowerB Because the PowerBook Duo™ System offers best of both worlds — a notebook that tran forms itself into a powerful desktop compu

Clearly, organizations using Macintosh h helped to make PowerBook the nation's bes selling notebook. But they haven't done it al

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Why Power
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MS-DOS and W

One drive fits all. *Using software included in the optional PowerBook/DOS Companion, the built-in Apple SuperDrive floppy drive can read/write MS-DOS and OS/2 disks - so moving files between platforms is effortless.*

ier support. *PowerBook ires less training than other books. So you can spend less helping frustrated user more time doing your job.*

Higher productivity. *PowerBook makes it easy to do more, so people can get more done using remote access, faxing and e-mail.*

MS-DOS-friendly. *The optional PowerBook/DOS Companion package gives you the necessary software and cables to work with MS-DOS files, printers and monitors you already own.*

serves your investments. *erBook is designed not just ork with existing desktop pment, but to help you get most out of it.*

PowerBook has also become the notebook nputer of choice in some rather surprising ces. Not only because it's designed for the way ple work outside the office, but because it rks so well with personal computers running -DOS or Windows.

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TORQUE OF

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In recent months, the talk of the automotive world has been the power, responsiveness and handling of the new BMW 7-Series V8, the 740i. "A sophisticated driving experience. A car to fall in love with," was how *Car and Driver* aptly appraised it.

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Introducing the 540i. As you might expect, the coupling of V8 power with 5-Series lightness and agility makes for an automobile that is truly deserving of talk.

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Superior engineering is evident in the 540i's

THE TOWN.

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PITCHING BASEBALL ON QVC: THE PARTNERSHIP WITH HOME SHOPPING NETWORK WILL CREATE A $2 BILLION RETAILING COLOSSUS

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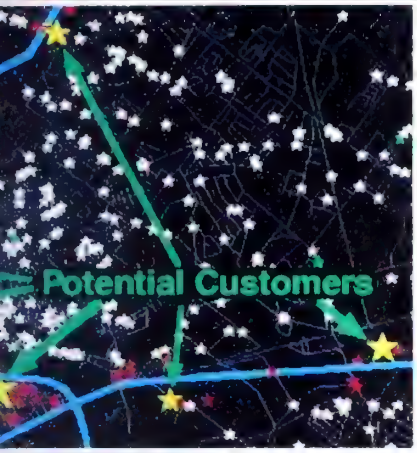
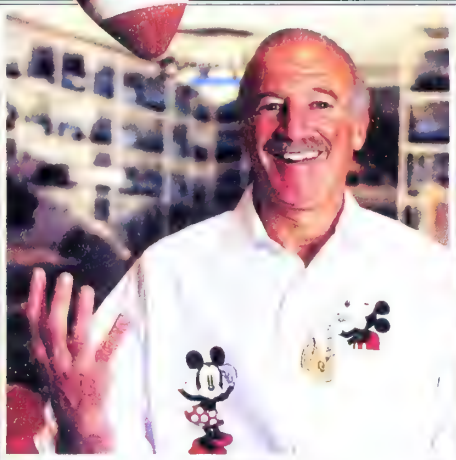
COVER ILLUSTRATION BY RAYMUNDO HAAST; PHOTOGRAPH ABOVE BY LARRY FORD





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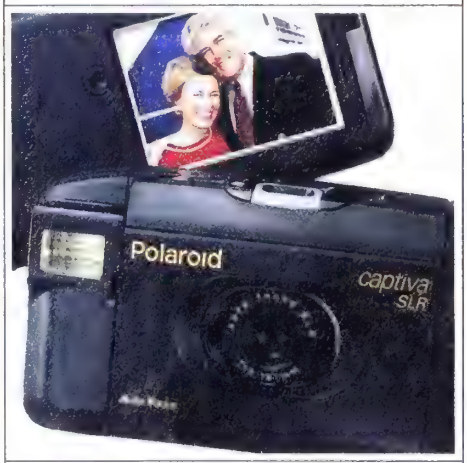

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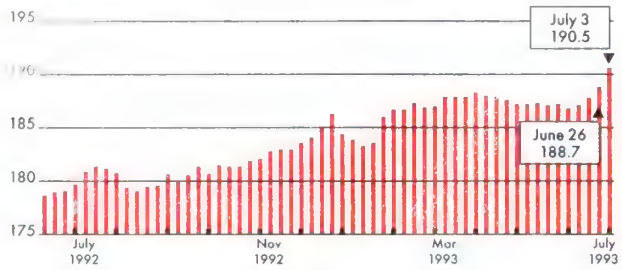
BusinessWeek Index

PRODUCTION

Change from last week: 1.0%
Change from last year: 6.1%

1967=100 (four-week moving average)

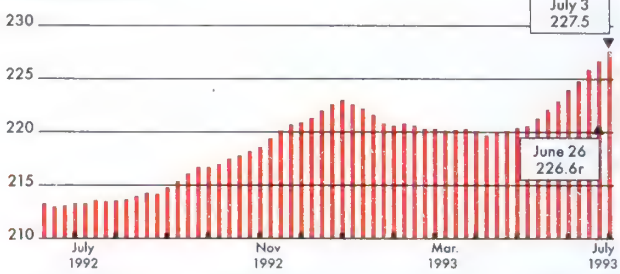


The production index increased during the week ended July 3. Output of autos, trucks, paper, and paperboard rose sharply, and steel, crude-oil refining, and lumber production increased as well. Coal output was down, while rail-freight traffic and electric power output were unchanged. Before calculation of the four-week moving average, the index climbed to 193.6, from 191.9. For the month of June, the index rose to 189.7, from 187.1 in May.

BW production index copyright 1993 by McGraw-Hill Inc.

LEADING

Change from last week: 0.4%
Change from last year: 6.7%



The leading index continued its climb into the week ended July 3. A further fall in bond yields along with faster growth in real estate loans boosted the index. Stock prices and M2 growth were lower, business failures rose, and the growth in materials prices was little changed from the previous week. Before calculation of the four-week moving average, the index rose to 228.8, from 226.9. For June, the index stood at 227, up considerably from May's 222.9.

Leading index copyright 1993 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (7/10) thous. of net tons	1,855	1,869#	4.6
AUTOS (7/10) units	63,560	110,240r#	−24.9
TRUCKS (7/10) units	45,243	89,397r#	4.8
ELECTRIC POWER (7/10) millions of kilowatt-hours	68,987	65,538#	5.4
CRUDE-OIL REFINING (7/10) thous. of bbl./day	14,363	14,304#	1.8
COAL (7/3) thous. of net tons	17,482#	18,741	5.0
PAPERBOARD (7/3) thous. of tons	843.8#	816.8r	3.6
PAPER (7/3) thous. of tons	785.0#	788.0r	0.0
LUMBER (7/3) millions of ft.	426.4#	463.4	13.2
RAIL FREIGHT (7/3) billions of ton-miles	21.0#	21.1	12.9

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA[1], SFPA[2], Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (7/14)	108	107	125
GERMAN MARK (7/14)	1.71	1.70	1.47
BRITISH POUND (7/14)	1.49	1.50	1.94
FRENCH FRANC (7/14)	5.87	5.75	4.97
CANADIAN DOLLAR (7/14)	1.28	1.28	1.19
SWISS FRANC (7/14)	1.51	1.51	1.32
MEXICAN PESO (7/14)[3]	3.125	3.123	3.096

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (7/14) $/troy oz.	394.400	395.800	12.4
STEEL SCRAP (7/13) #1 heavy, $/ton	118.50	115.00	33.9
FOODSTUFFS (7/13) index, 1967=100	205.8	209.0	2.4
COPPER (7/10) ¢/lb.	92.0	90.3	19.8
ALUMINUM (7/10) ¢/lb.	57.6	57.5	−4.0
WHEAT (7/10) #2 hard, $/bu.	3.14	3.03	−11.5
COTTON (7/10) strict low middling 1-1/16 in., ¢/lb.	55.01	52.72	−10.7

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, *Metals Week*, Kansas City market, Memphis market

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (7/9) S&P 500	445.26	445.56	8.0
CORPORATE BOND YIELD, Aaa (7/9)	7.22%	7.24%	−10.6
INDUSTRIAL MATERIALS PRICES (7/9)	95.4	95.8	−3.2
BUSINESS FAILURES (7/2)	349	330	11.5
REAL ESTATE LOANS (6/30) billions	$402.0	$398.6r	−0.5
MONEY SUPPLY, M2 (6/28) billions	$3,471.1	$3,483.9r	1.2
INITIAL CLAIMS, UNEMPLOYMENT (6/26) thous.	339	351	−18.5

Sources: Standard & Poor's, Moody's, *Journal of Commerce* (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusts data on business failures and real estate loans

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
BUSINESS WEEK PRODUCTION INDEX (June)	189.7	187.1r	6.0
BUSINESS WEEK LEADING INDEX (June)	227.0	222.9r	6.5
CONSUMER PRICE INDEX (June)	144.4	144.2	3.0
PRODUCER PRICE INDEX (June) finished goods	125.3	125.7	1.5

Sources: BW, CIBCR, BLS

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (6/28)	$1,076.8	$1,075.5r	13.5
BANKS' BUSINESS LOANS (6/30)	276.0	275.0	−2.8
FREE RESERVES (7/7)	933	603r	58.9
NONFINANCIAL COMMERCIAL PAPER (6/30)	153.1	158.9	8.1

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed for a two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	Year ago
FEDERAL FUNDS (7/13)	2.99%	3.19%	3.28%
PRIME (7/14)	6.00	6.00	6.00
COMMERCIAL PAPER 3-MONTH (7/13)	3.19	3.14	3.43
CERTIFICATES OF DEPOSIT 3-MONTH (7/14)	3.14	3.09	3.43
EURODOLLAR 3-MONTH (7/9)	3.14	3.19	3.35

Sources: Federal Reserve Board, First Boston

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart), other components (estimated and not listed) include machinery and defense equipment. 1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

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SO MANY RESOURCES, SO LITTLE WEALTH

In Obrajes, an affluent La Paz neighborhood, Bolivian President-elect Gonzalo Sánchez de Lozada slouches in an easy chair in the library of his Mediterranean-modern home. "Goni," as almost everyone in Bolivia calls him, is a self-made mining tycoon with years of hands-on business experience. He is also versed in macroeconomics: As Planning Minister in the mid-1980s, he stopped 24,000%—that's right, 24,000%—annual hyperinflation nearly dead in its tracks with drastic free-market reforms. His library shelves are lined with economics books in English, which he speaks fluently with the Midwestern accent of Chicago, where he spent his youth—and in Spanish, which he also speaks like a Chicagoan.

Before taking up mining, Sánchez, now 63, tried his hand at other occupations, such as filmmaking. Puffing a Dominican cigar, he ruefully recalls turning down an offer from a Hollywood studio in hopes of getting a higher bid for a script he had written about American outlaws Butch Cassidy and the Sundance Kid, who died in a Bolivian shootout, so it is said, around the turn of the century. Eventually, Hollywood transformed that footnote to Bolivian history into a huge box-office hit—but with someone else's script.

SELL-OFF. After he takes office on Aug. 6, Sánchez must figure out how to sell a more substantial legacy of Bolivia's recent history: the array of state-run companies, in industries from oil to telephones to smelters, bequeathed by the leftist governments that ran the country from the 1950s to the 1970s. Bolivia is resource-rich in minerals and energy. But it is income-poor, with a gross national product of only $920 per capita. Despite free-market reforms by President Víctor Paz Estenssoro in the 1980s, growth has leveled off: Last year's 3.4% GNP gain was down from 4.6% in 1991.

"The economy has reached a plateau," says Angel Curet, manager of Mobil Corp.'s Bolivian operations. "It needs a jump start." What's needed, most Bolivians now agree, is to lure foreign investors to inject fresh capital into the ramshackle state-run enterprises. Such an inflow will be "like a locomotive," Sánchez says. "It will attract lots of other investment."

What the President-elect proposes is to privatize state-run companies under his *Plan de Todos*, or Everybody's Plan. He campaigned with this as his centerpiece—although he calls it "capitalizing" the companies—and won the presidency with a 34% plurality against two major rivals in the June 6 election. Sidestepping opposition to letting foreigners control key economic sectors, Sánchez proposes to sell up to 49% of the shares in such state-run companies as oil monopoly YPFB to foreign buyers, giving them contracts guaranteeing management control. The other shares would be held in trust for the Bolivian people, to be distributed when they have acquired a mature market value, possibly five years from now. The plan "would create a market on the order of $2 billion to $3 billion," Sánchez estimates.

Years of talking with people around the country, plus many polls and focus groups, have convinced Sánchez that Bolivians understand his proposals, although many have little education. The country is fragmented ethnically, too: About 30% of its citizens are Quechua Indians, 25% Aymará Indians, 15% Europeans, and 30% mixed. But across the spectrum, Bolivians "are very scared of debt" as the source of hyperinflation, Sánchez says.

Independent economists think Sánchez is too optimistic in the dollar figures he attaches to his plan. While they estimate that YPFB has a market value of at least $1 billion, they doubt that other state-run enterprises are worth much—at least until they are restructured. Right now, Sánchez says, the state companies are controlled by a "network of corrupt union leaders, managers, and the political party that's in power." Loosening such shackles will be crucial to his success.

What gives credibility to Sánchez' plan is that Bolivians are now backing free-market policies. He has already lined up a 60% congressional majority to push through his

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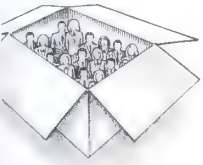

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VISA

Source: Visa Panel Study Diary 1991-92. **Source: Silny, Rosenberg 1992. ***Source: Simmons 1992.

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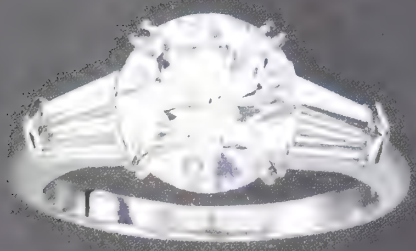
I'll always remember that face. The smile bordering on a tear. Silence as powerful as music. Eyes as lively as the diamond I nervously slipped on her finger. And now that we have come so far together, perhaps now is the moment to celebrate that love, once again, with a diamond as exceptional as our love.



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Letter From Bolivia

MINING IN BOLIVIA: HUGE RESOURCES STILL EXIST

proposals. One ally is beer baron Max Fernández, another self-made businessman who ran third in the presidential campaign. "We've never had an election in which the candidates were so close together in ideology," says political analyst Jorge Lazarte. That reflects Bolivia's maturing democracy, he says, adding: "This is probably the longest period we've had democracy without a lot of violence." Until Paz Estenssoro's 1985 inauguration, governments changed more often by coups than by ballots.

This new political consensus is reassuring to investors. Banks have been seeing a steady reflow of Bolivian funds from abroad. And recently, a flock of mining companies—U. S., Canadian, Australian, and others—have been scouting mineral prospects. The biggest new venture is a $163 million gold mine near Oruro, 85%-owned by Houston's Battle Mountain Gold Co. with local partners, which is tripling Bolivia's gold output. "I think we will see people commit some money who have just been doing basic geological research," says Edward R. Derksen, vice-chairman of BHN Multibanco, a Bolivian-controlled bank.

Rich oil prospects also are drawing investors. Some 20 companies spent more than $100 million last year on exploration and development of oil fields, including a find by Dallas' Maxus Energy Corp. The companies operate under contracts with YPFB that provide for a 50-50 split of any oil discovered.

The chief obstacle to Bolivia's makeover is a morass of bureaucracy and bribery that hobbles investment, local and foreign. What's needed is "strong leadership to direct the bureaucracy," Derksen says. As Planning Minister in Paz Estenssoro's 1985-89 government, Sánchez displayed a firm hand. He fired three-fourths of the miners working for the state-owned mining company. He also removed exchange controls, balanced the budget, and shrank the tax structure from around 500 brackets to eight.

His gringo accent is still something of a handicap. During the campaign a peasant confided to him: "Goni, you'd win 51%, no problem, if you were Bolivian." That problem was partly offset by his running mate, Víctor Hugo Cardenas, an educator who will be the first Aymará Indian to hold the vice-presidency. "I'm just like two-thirds of Bolivians," says Sánchez, referring to the majority whose native idioms are Indian languages. "None of us speak Spanish well."

PEOPLE'S CHOICE. The son of a diplomat, Sánchez was taken to the U. S. when he was a year old and stayed there until he graduated from the University of Chicago with a degree in philosophy. At 21, he returned to Bolivia, where his once-wealthy family's property was confiscated in the nationalizations of the 1950s, and started working as a filmmaker. Later, he invested in small mines and built up what is now Comsur, the country's biggest private mining company. Although Bolivian law doesn't require it, he says he will put his Comsur holdings in a trust.

Bolivians who voted for Sánchez think he's their best hope to launch the country on a long voyage out of poverty. For Sánchez de Lozada, the first step is to persuade foreigners to put their money on his plan.

IAN KATZ

Contributor Katz is based in Buenos Aires.

Sustainable Development

What Does It Mean For Industry?

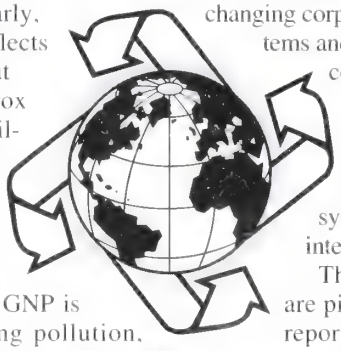
Sustainable development is not just a platitude invented for the Earth Summit held a year ago in Rio. It is rapidly becoming a standard that scientific realities and social demands will require of all economic activity. Those companies that can recognize the nature of the transformation required and hence better anticipate the escalating demands they will face – from customers, competitors, governments, and the communities in which they do business – can shortcut their learning curve. They can plan their future, not be forced into it.

One aspect, one face of sustainable development is what might be called eco-efficiency. It calls for nothing less than the maximum possible efficiency in the use and stewardship of the Earth's resources. That means the goals must be waste-free products, waste-free factories, minimal use of virgin materials, and no pollution. Just as in the case of quality, any goal less than "zero defects" is inadequate to ensure continuous improvement.

The call to prevent pollution, not just clean it up, is now standard among environmentally-enlightened companies. So is the effort to reduce, reuse, and recycle materials. These concepts have an obvious appeal in an era in which a "green" reputation is much desired. Those companies that have seriously implemented such policies know an even better reason: It pays. Eco-efficiency is often a fast route to improved productivity, and it can be measured on the bottom line of a company or a nation.

The reason is quite clear. Controlling pollution costs money. Preventing pollution can save money. Pollution is a sign of inefficiency, not just environmental insensitivity.

Eliminating wastes in the first place yields a more efficient process, not to mention avoiding the add-on costs of pollution control equipment, emission fines, landfill fees, and superfund liabilities. Since 1975, 3M estimates that it has prevented more than 1 billion pounds of pollution and saved more than $500 million (initial year savings from 300 separate projects). Similarly, every pound of waste reflects raw materials paid for but not sold as products. Xerox reports reclaiming 1.6 million pounds of photoreceptor material and 35 million pounds of metal, plastic, and other material every year.



Nationally, 2% of the GNP is now spent on controlling pollution, costs that are rising faster than either national health care or legal expenses; if pollution were avoided and these funds were reinvested instead, it would go a long way toward creating millions of needed new jobs.

The possibilities already demonstrated are numerous: replacing hazardous solvents with more advanced (and less polluting) cleaning processes; reusable shipping containers; more efficient furnaces, motors, and lights; redesigning processes to avoid creation of toxic byproducts; use of renewable or recycled resources.

"Nationally, 2% of the GNP is now spent on controlling pollution."

But eco-efficiency has implications beyond the manufacturing plant itself. After all, products can be a source of pollution too, and all too many end up as waste themselves once their useful life is over. The principle that a company's responsibility for what it makes does not end with the sale of the product is already well established in safety legislation. Germany is taking the concept a step further environmentally, and holding companies responsible for the recycling or ultimate disposal of everything they make. That may well be the future. A recent report from the Congressional Office of Technology Assessment concludes that the ability of U.S. companies to compete in European and Japanese markets will depend on designing products in a way that protects the environment.

Taking the product back again profitably means incorporating environmental considerations in its design from the beginning. It may mean optimizing the design for disassembly or recycling, using more sturdy components that can be reused or remanufactured, and using only environmentally-compatible materials. It means minimizing costs over the life cycle of the product, not just unit costs in manufacturing – which means changing corporate accounting systems and many other aspects of corporate and consumer culture. It means educating customers and suppliers and helping to develop recycling systems nationally and internationally.

Those companies that are pioneering this trend report that the most difficult problem they face is getting their own people to believe that design for environment will save money. Yet they report that careful calculations and actual experience often show enormous long-term savings – enough to provide a powerful, independent justification of the design-for-environment approach.

Some major companies, like Xerox, are now designing next generation products that will contribute little or nothing to landfills at the end of their life – every component will be reused or recycled. Sustainable development is likely to require this approach, perhaps sooner than later. But if eco-efficiency is profitable now and confers a competitive advantage, why wait to begin?

The twin forces of rising social expectations (reinforced by law) and markets that reward greater efficiency and productivity will combine to make eco-efficiency common practice among industrial companies. That is good for business, good for people everywhere, and good for the planet – which might be another definition of sustainable development.

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Readers Report

EDITOR'S MEMO

BUSINESS WEEK GOES MULTIMEDIA

Whether the subject is computer chips or fiber optics, BUSINESS WEEK has consistently led the way in covering technology and its influence on the way we live and work. So it should come as no surprise that BUSINESS WEEK is also at the forefront in applying new technology to its own business.

Earlier this year, the magazine's editors decided to "go multimedia" by taking our annual special issue, the BUSINESS WEEK 1000—in which we rank by market value the largest companies in America—and translating it into a CD-ROM product, replete with audio and video features.

Instead of getting a printed list of the companies, ranked in several different ways, users of the multimedia 1000 can now sift and sort them to suit their particular needs. If you want to learn more about a specific company, with the stroke of a key you can call up on your computer screens more detailed reports prepared by Standard & Poor's Corp., our sister unit at McGraw-Hill Inc. Those provide historical financial records, industry context, recent corporate developments, and other useful information.

The multimedia format has also made it possible for us to expand two features of our special issue: profiles of 25 executives and the photo essay. Thirteen of the executives agreed to discuss a range of issues in taped interviews, which were then collated into an "executive roundtable." And with this year's photo essay, which focuses on Chrysler Corp., you can watch and listen as factory workers and top executives describe key elements of their corporate turnaround.

All told, 32 BUSINESS WEEK staffers worked on the project for more than six months. Helping at every step was Ehrlich Associates Inc., an Oradell (N. J.)-based company that specializes in developing multimedia products. All in all, it was an exciting experience and—since our extensive coverage shows this is a burgeoning industry—it's sure to be the first of many CD-ROM products from BUSINESS WEEK.

Readers who want more information or wish to order the multimedia BUSINESS WEEK 1000, which costs $399, should call 800 396-0999.

Stephen B. Shepard

Editor-in-chief

BROOKS BROTHERS STANDS BY ITS SUITS AND ITS SERVICE

I am extremely concerned by your recent article "What's next? Grunge bathrobes?" (Marketing, June 21) about Brooks Brothers, which I believe gives a totally wrong impression to your readers. Some examples:

■ I made it very clear that under no circumstances were we pursuing policies that would jeopardize the confidence of the older and more traditional customer in Brooks Brothers product or service. Moreover, I stated clearly that attracting a new, slightly younger customer was only a modest part of developing our sales in an increasingly competitive retail climate, faced with a trend toward a more casual style of dressing.

■ To say that "the personal attention customers used to receive has all but disappeared" is rubbish. We are increasing the

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MAYBE AL GORE SHOULD LOOK UP THE WORD 'STREAMLINE'

Vice-President Al Gore's assignment to streamline government ("A productivity junkie takes on fat city," Government, July 5) is a worthy task. But it may be wise to postpone the celebration. A preview of his approach is available by looking at how he is staffing his own office. As of Mar. 31, Gore had hired 57 Senate staff members, including 3 executive assistants, 10 special assistants, plus 35 staff assistants.

Dan Quayle's staff never exceeded 42. I don't think I can stand much more of this "improved government." Can you?

William E. Poole
Prescott, Ariz.

Editor's note: The Vice-President's office says Gore's Senate budget and permanent staff are currently the same as Quayle's.

KIWI AIR LINES IS CONSIDERING —REPEAT, CONSIDERING—AN IPO

Your story "Little airlines, big opportunities" (Finance, July 5) captured what we and our financial advisers have believed for several years as we put together KIWI International Air Lines: that small, streamlined, and highly focused airlines can make big money if operated properly.

Now that the cat is out of the bag and the larger financial institutions finally realize that small airlines are fundamentally different from large airlines—and there is indeed great potential in this market segment—I would like to clear up a misquote in the article, which has caused some confusion among our financial partners and those wishing to become involved with KIWI.

KIWI International Air Lines is presently considering a full range of debt and equity options for our next step of funding. An initial public offering is only one of several options. There are several other forms of private and public funding under consideration. We must carefully weigh these options as we move forwar

Robert W. Iverson, Chairman and CE
KIWI International Air Line
Newark, N.

DON'T LISTEN FOR MCDONNELL'S NEW JET: IT'S TOO QUIET

McDonnell Douglas thinks your Par Air Show coverage ("Meet Bill Clin ton, arms merchant," Top of the News June 28) is proof that our twin-engin MD-90 is here at the right time.

The article says the only demonstratio flights of new commercial aircraft wer by a French company. Not so. Our MD-9 flew six times during the show.

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Bill Jone
McDonnell Douglas Cor
Long Beach, Cali

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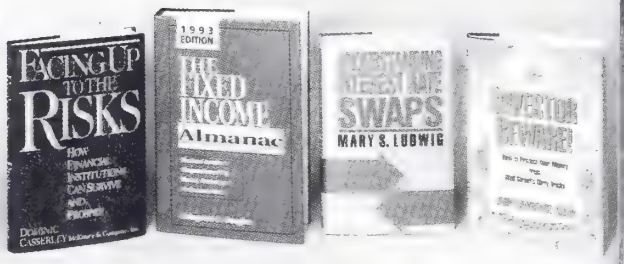

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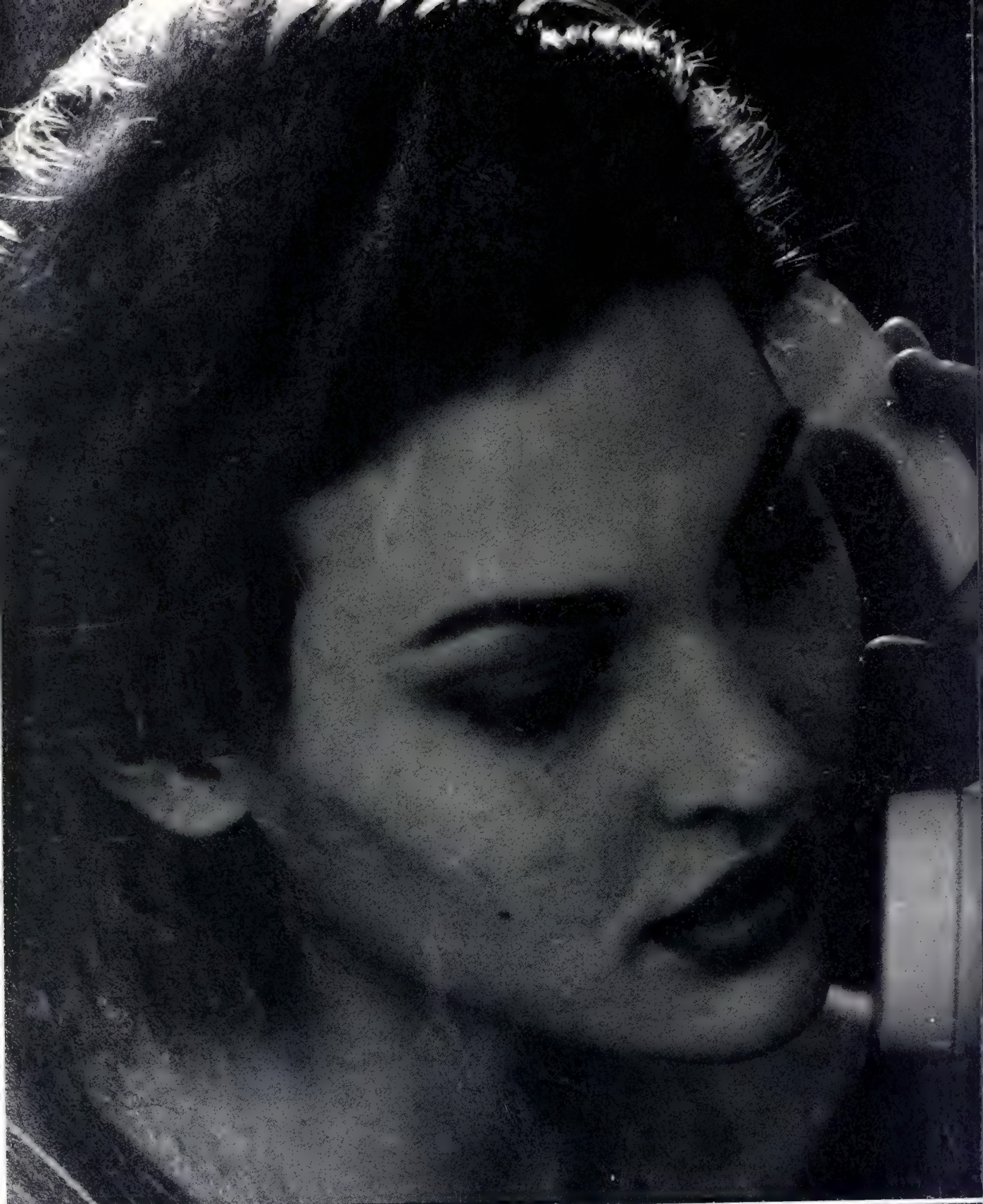

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THE CHILDREN'S MACHINE: RETHINKING SCHOOL IN THE AGE OF THE COMPUTER
By Seymour Papert
Basic Books • 272pp • $22.50

CAN COMPUTERS RECREATE THE CLASSROOM?

About 500 years ago, Leonardo da Vinci sketched out the first airplane. The reason the people of his time couldn't build one, though, was not because his dreams of flying machines were off-base, but because the necessary engines, fuels, and tools didn't yet exist. By the time the Wright Brothers arrived, on the other hand, the technology was there to validate the vision.

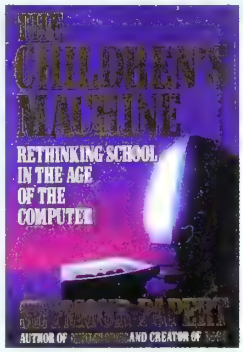
In the same vein, psychologists such as Jean Piaget and educators such as John Dewey told us 50 and 100 years ago that the way modern society teaches its kids is incompatible with the way they learn. Inspired by their bold ideas, progressive educators have been trying—and largely failing—to reinvent and reform public schools for decades. In *The Children's Machine*, Seymour Papert argues that what's been missing is the right technology.

Papert identifies the needed technology as the Knowledge Machine—essentially a personal computer that runs engaging, interactive software. While computers have been here for years, Papert, a professor of mathematics and education at Massachusetts Institute of Technology, thinks there haven't been enough PCs in schools to spark what he calls "megachange" in education. At the end of the '80s, he notes, the nearly 50 million American children enrolled in kindergarten through 12th grade were sharing about 3 million PCs.

Even more important is the way the education establishment has misapplied computers, Papert says. Since kids can use them to explore knowledge in any way and at any pace they please, Papert sees the machines as subversive tools that threaten the educational bureaucracy. In his view, the establishment, obsessed with pouring a predetermined curriculum into a sea of minds and then administering tests, has forced the computer into its rigid teaching model. That's why classroom computers are mainly used in one of two ways: Either they function as electronic flash cards in rote drills, or they are mistakenly added to the curriculum for the sake of "computer literacy," as if learning about the computer itself was the important thing.

Papert, who studied under Piaget for four years in the 1960s, sees the computer as a tool for learning about the world. According to his mentor, "play is a child's work." The late Swiss psychologist believed that kids learn best when they playfully construct their own learning environments with only gentle guidance from adults. And that, Papert says, is where computers, with their ability to present any type of information on command, come in. With computers, kids can construct and participate in "microworlds," such as a game in which they must solve math problems to, say, move a train across the screen.

Papert argues that the education establishment has misunderstood and misapplied computers



Papert reports on Debbie, a fourth-grader who was listless during classroom lessons about fractions. Later, while writing poems on the computer, she discovered that a graphics program she used to decorate her poems could also be used to draw fractions. When other kids in the room wanted to know how it was done, Debbie suddenly became an expert on a subject in which she had little prior interest.

The book contains many such triumphant tales. All focus on the qualitative aspects of how kids learn. Papert never tries to measure whether computers boost student achievement. As such, his book is detached from much of the current debate about education. Papert rails against the America 2000 program, a set of broad goals for excellence pushed by President Bush and repackaged as Goals 2000 by President Clinton. Papert calls it an unrealistic attempt to solve problems by decree, imposing more exams instead of changing the basic nature of what happens in classrooms. But Papert proposes no alternative way to check whether students are up to snuff.

And while the jacket flap promotes *The Children's Machine* as a "how-to" book, Papert tells teachers and parents little about how to judge which software is useful. Instead, he mainly discusses Logo, a simple programming language he invented. With Logo, children learn science and math by manipulating turtles and other objects on a computer screen. But only a fraction of schools use Logo, and Papert's many references to it come off as self-serving.

To his credit, though, Papert sticks to what he knows best: How kids learn using the technology he's familiar with. As co-founder of MIT's Artificial Intelligence Lab and a lifelong student of learning itself, he brings to the topic a unique mix of insights. For a more political and economic approach, readers can always turn to *School's Out*, a 1992 book by Lewis J. Perelman, a conservative theorist. Perelman looks forward to the day the nation's public schools become extinct because, he says, information technology can now deliver instruction far more efficiently than today's teachers.

Papert, fortunately, is not so glib as to call for scrapping the entire school system. He doesn't suggest that computers are a panacea or a substitute for human interaction and hard work. Still, he presents some pretty provocative ideas. He asserts, for example, that in a world of multimedia information, literacy as currently defined—to mean proficiency with words—is too narrow a goal. Learning via video, graphics, and even virtual reality should be on an equal footing. Such arguments are central to one of the key questions of our time: How do we educate tomorrow's knowledge workers, who will have to constantly seek and absorb new information? Put to its best use, the computer can be the catalyst for a sorely needed educational renaissance.

BY EVAN I. SCHWARTZ

Staff Editor Schwartz covers software.

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WHY THE ECONOMY ISN'T HEEDING CLINTON'S CALL

BY ROBERT KUTTNER

Cutting the deficit and easing interest rates aren't enough to shift this recovery into high gear. Only a major public and private investment program will do that

President Clinton has now accepted the view that deficit reduction will produce low interest rates, and low interest rates will produce economic recovery. This mantra has become central to every speech he makes on the economy. The only trouble is that the economy is unlikely to oblige.

Recent statistics show pervasive economic softness. Unemployment in May edged back to 7%, from 6.9% in April. Housing starts dropped 21%. Consumer confidence and the index of leading indicators both fell again. Capacity utilization, though rising, remains well below the postwar average.

The longer-term numbers are even more depressing. According to the Congressional Joint Economic Committee, real growth in gross domestic product since the trough of the recession has been less than half the GDP growth rate of the average postwar recovery. Joblessness is higher today than in March, 1991, when the recession officially ended. A forthcoming study by Lawrence Mishel of the Economic Policy Institute reveals that while temporary positions account for only 1.5% of total jobs in the economy, temp jobs accounted for fully 30% of the 1.6 million new jobs created in this recovery. Mishel also shows that average real wages fell during the recovery for both blue- and white-collar workers.

In the face of this sluggishness, Congress and the Administration have convinced each other that they ought to pursue a contractionary fiscal policy worthy of a raging inflationary boom. The tax hikes and spending cuts in the budget for fiscal 1994 will reduce demand by $70 billion, to $80 billion. It is unlikely that monetary policy will offset this contraction. At its May meeting, the Federal Reserve Board's Open Market Committee (FOMC) voted to tilt slightly in favor of tighter money at the first sign of inflation. So the likely prospect is for more of the same: a vicious circle of slow growth, high unemployment, weak demand, inadequate investment—and more slow growth.

FALSE ASSUMPTIONS. The conventional view of the primacy of deficit reduction, which Clinton has unfortunately made his own, is built on several fallacies. The first is that business investment is highly sensitive to interest rates. But history shows that business invests when it anticipates customers, not simply in response to the cost of money. Real interest rates were roughly zero during the Great Depression, but there was no investment boom.

At first, deficit reduction was touted mainly for supply-side reasons: A lower deficit would produce lower interest rates and hence more investment. But lately, the Administration has embraced cheaper interest rates as a kind of Keynesian cure: Consumers now have more money to spend because they're refinancing mortgages, saving money on consumer debt, etc. By this logic, cheaper money stimulates spending, not savings and investment.

A second fallacy is the old monetarist claim that the public deficit and long-term interest rates are closely linked. Supposedly, big deficits portend inflation, which causes bondholders to bid up rates. At some extreme, this is undoubtedly true. But economic history shows that interest rates and deficits hardly move in lockstep. The missing variable is policy. Public deficits were enormous during World War II. By the late 1940s, accumulated public debt exceeded 100% of one year's gross national product. But the Federal Reserve Board of that era was committed to an accommodative monetary policy, and long-term rates remained at 2.5%. The Greenspan Fed has been easing rates since 1989 despite the persistence of large deficits.

ESCAPING THE TRAP. A third fallacy is that public borrowing crowds out private borrowing. Again, that's true at some extreme, but we are nowhere near that extreme. The problem in today's economy is that banks can't find creditworthy borrowers, not that public borrowing has depleted capital markets. To get out of the slow-growth trap, the Fed and the Administration need a long-term pact that both restores investment and keeps real interest rates very low, rather than a strategy that accomplishes one goal at the expense of the other.

Lately, flooding in the Midwest and upward pressure on commodity prices, as well as speculative increases in the price of gold, have given the Fed's inflation hawks new ammunition. But these indicators are grossly misleading. The core inflation rate remains low because the economy is ice-cold. Unit labor costs—the flipside of stagnant wages—have been increasing at about half the inflation rate. In this economy, it would be disastrous for the Fed to nudge rates up even slightly.

The Administration, for its part, needs to revive a big public and private investment package once the 1994 budget deal is complete. Public borrowing for such a program should be understood to be a direct source of higher investment, not a stimulus to demand. In this economy, the real problem is deflation, not inflation, and a big investment package, coupled with low interest rates, is necessary to jump-start growth. Unfortunately, the economy is likely to become even flatter before that reality is widely acknowledged by policymakers.

ROBERT KUTTNER IS CO-EDITOR OF *THE AMERICAN PROSPECT* AND AUTHOR OF *THE END OF LAISSEZ-FAIRE*

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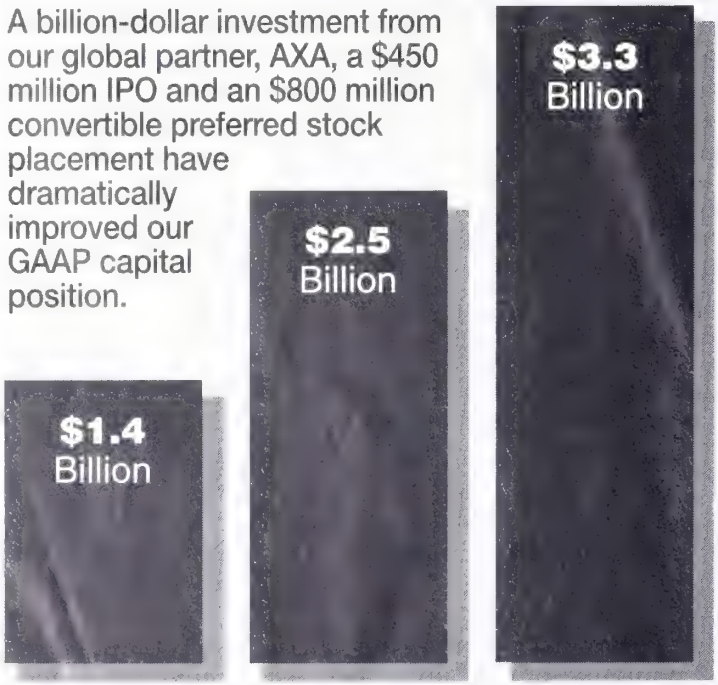

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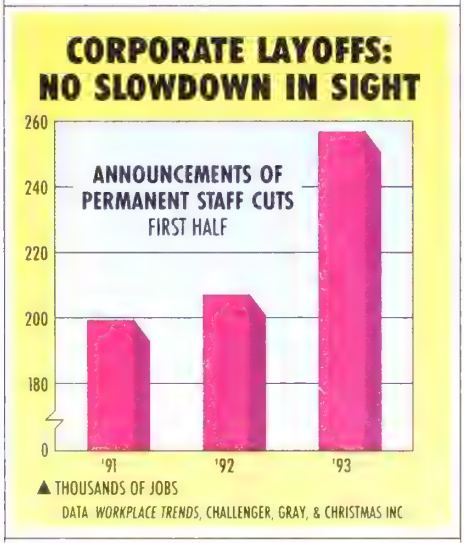
BY GENE KORETZ

DOWNSIZERS CHALK UP A RECORD FIRST HALF

Although payroll jobs hardly rose in June, many economic observers predict that job growth, which grew at a healthy 235,000 clip in April and May, will pick up considerable steam in the months ahead. James E. Challenger, president of Challenger, Gray & Christmas Inc., an outplacement firm that monitors the staff cuts announced by major U. S. corporations, is skeptical, however. "There is no sign yet that layoff announcements by big companies are waning," he says. "Until they do, employment growth is likely to prove disappointing."

According to Challenger's count, the number of job cuts announced by U. S. companies rose sharply, to 38,669 in June from 14,086 in May. Moreover, in the first six months of the year, Corporate America unveiled plans to do away with close to 255,000 jobs, 23% more than in the same period last year, and the largest first-half tally ever.



Not surprisingly, perhaps, the staff-reduction parade is being led by the aerospace industry. Reeling from cutbacks in defense spending and problems affecting airlines, aerospace accounts for roughly a third of the cuts announced so far this year. Not far behind is the retail industry—thanks largely to the 50,000 jobs slated for elimination by Sears, Roebuck & Co.—followed by the computer industry, transportation (mainly airlines), and communications companies, such as American Telephone & Telegraph Co.

On a regional basis, companies headquartered in the Northeast and the West account for well over half of the announced layoffs so far in 1993. And California was the state with the most companies planning layoffs—76 out of 311 unveiling such plans nationwide.

Large companies, of course, have been shedding jobs either through attrition or staff reductions for a number of years, while much of the job growth in the past decade has been generated by small businesses—particularly those employing fewer than 20 workers. What makes the recent pickup in layoff announcements by big companies so ominous to economists are fears that the small-business job creation machine will be adversely affected by coming tax hikes just as many larger companies are implementing their latest layoff plans.

WHY ARE CONSUMERS SO SPOOKED BY INFLATION?

Economists may believe that inflation is dead in the water, but consumers are still seeing inflationary ghosts. Economist Edward E. Yardeni of C. J. Lawrence Inc. points out that respondents to the University of Michigan's consumer sentiment survey in June said they expected inflation to average 4.8% in the year ahead. That's up from 4.4% in May and 3.3% six months ago.

Since the latest inflation readings (including June's 0.3% drop in the producer price index) have been reassuring, it's not clear why inflation fears are growing. Yardeni thinks it's rising concern over coming hikes in cigarette and gasoline taxes. He points out that confidence in the government's economic policies continues to wane—with 40% of households indicating they felt the Administration was doing a poor job in June, compared to 28% as recently as March.

OFFICE BUILDERS FACE ANOTHER BLOW ON THE TAX FRONT

In the early 1980s, the Reagan Administration handed commercial building investors a tax bonanza in the form of accelerated depreciation, which slashed the depreciable lives of buildings from 39 to 15 years. Partly as a result, commercial construction, particularly office structures, virtually exploded. The 1986 Tax Reform Act helped deflate that building boom by lengthening depreciable lives to 31.5 years. Now, after the Clinton Administration proposed a boost to 36 years, the Senate and the House budget bills are calling for an even larger increase to 38 or 39 years.

The upshot is that depreciation allowances will be back to where they were before the booming 1980s, and the still bloated office-building industry will find it harder to get up off the floor.

POISON PILLS DIDN'T KILL THE MERGER BOOM

Economists tend to regard the merger-and-acquisition boom of the 1980s as a positive development, which enriched stockholders while shifting control from complacent managers to more efficient, profit-minded executives. Thus, some charge that poison pills and state statutes aimed at hindering takeovers were self-serving mechanisms adopted to protect management and may well have caused the demise of the merger boom at the end of the 1980s.

A new study by economists Robert Comment and G. William Schwert of the University of Rochester concludes that poison pills and protective laws had little impact on the incidence of takeovers, however. Out of some 2,000 exchange-listed companies, the two researchers report that more than a third adopted poison pills in the last half of the 1980s. Indeed, by 1991, 87% of such firms were covered by either a poison pill or a protective state statute. But though acquisition activity fell sharply at about the same time, that doesn't mean that poison pills caused the demise of the merger wave.

Comment and Schwert found that takeover activity in 1989 and 1990 subsided significantly across the board—even in states without protective laws and among companies without poison pills. Thus, they say the likely cause of death of the acquisition boom was not poison pills but such concurrent developments as the economic downturn and the credit crunch fostered by regulatory action to curb junk bonds and banking system excesses.

The study also suggests that stock market investors have little to complain about. It found that the adoption of poison pills had no significant effect on stock prices of companies that were not targets of takeover bids. But by giving added bargaining leverage to targeted companies, poison pills seem to have benefited their stockholders. While the takeover premiums garnered by shareholders of acquired companies without poison pills averaged 30%, they averaged nearly 48% for companies with poison pills in their arsenals.

Y 26, 1993

BY JAMES C. COOPER AND KATHLEEN MADIGAN

HE ECONOMIC FORECAST IS A LOT BALMIER THAN THE WEATHER

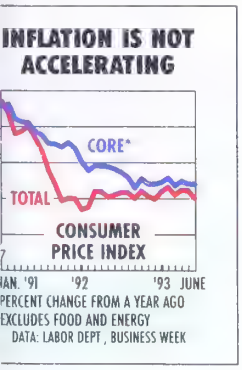
April may be the cruelest month, but July is turning out to be torturous for most of the U. S. Heavy rains have caused flooding along the Missippi River, while record high temperatures have sizzled e Eastern states like so many rashers of bacon.

But while the lethal weather has caused enormous suffing, its economic impact will be small and temporary. e U. S. economy still seems poised for better growth in e second half of the year, following a disappointing st half. And in particular, excess capacity and surplus lar both at home and abroad mean the outlook for inflan remains very positive.

To be sure, the rain and heat of the past few weeks will ffet the economic data for July and perhaps for August well. Retail sales could take a hit, after posting a good in in June. That's also true for July housing starts and nufacturing output. In addition, to plant shutdowns, les in the transportation system will also stymie facto activity, since trains and barges stranded along the ssissippi cannot move goods.

THE FED MAY WELL BACK OFF A BIT

But despite the weather-related supply disruptions, consumer inflation should remain quiescent in coming months (chart). That's partly because the cost of grain ntributes so little to the final price of processed foods. d if the Midwest rains diminish, as is now forecast, car should begin moving soon, avoiding any drawn-out ortages or production bottlenecks.



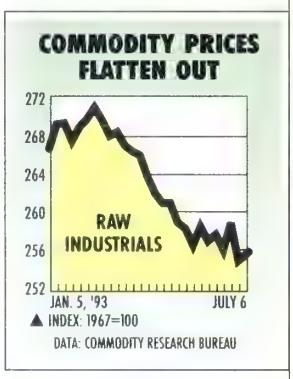
The chief reason, however, why inflation will stay down is the lack of sustainable price pressures. That much seems clear from the government's exceptionally tame reports on producer and consumer prices in June. Both these reports, combined with the becalmed May price indexes, give further confirmation that the early-year inflation scare was unfounded.

The consumer price index did not rise at all in June, folving a slight gain of 0.1% in May. Prices declined for od, especially fruits and vegetables, along with gasoline, thing, tobacco, and home furnishings. After starting the st four months of 1993 at an annual rate of 4.3%, inflan for the first half has now cooled off to just 3.1%. The me pattern is true for core inflation, which excludes engy and food prices. The core CPI rose by a scant 0.1% in June, after having posted a modest 0.2% increase in May.

Inflation's subdued behavior has not gone unnoticed in the bond market. After the release of the CPI data on July 14, the yield on 30-year Treasury bonds closed at a record low of 6.56%. Long-term rates have been falling since late May, and the decline may not be over. With 1993 inflation now looking closer to 3% than 4%, many market players are not ruling out a move to below 6.5%.

As early-year inflation fears unwind, in combination with the recent tepid performance of the economy, the Federal Reserve is very likely to rescind its bias toward tighter monetary policy adopted at its May 18 meeting. Judging by the recently released minutes of that session, the Fed clearly recognized that factors such as excess capacity, high unemployment, and global competition argue that the winter price jumps were anomalies.

In addition, the central bank is also aware that problems in the way the government seasonally adjusts the data may have contributed to the large price rises reported earlier.



Even after seasonal adjustment, BUSINESS WEEK has found that the total consumer price index consistently overstates price increases in the first and fourth quarters of the year. Most of the exaggeration comes from uncaptured seasonal trends in food and energy costs. Also, adjustment problems in apparel prices cause the overstatement of the core inflation rate in the first quarter. When the CPI data are readjusted, inflation looks tamer.

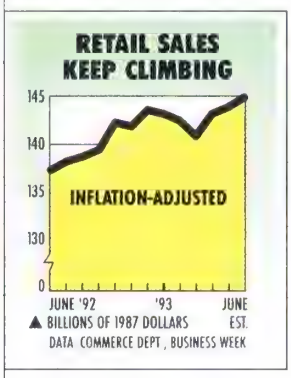
A GLOBAL LOSS OF STEAM FOR INFLATION

Clearly, there are no price pressures building among goods producers or commodity suppliers that will feed consumer inflation (chart). The producer price index for finished goods dropped by 0.3% in June, after no gain in May. The core PPI fell 0.1% after rising only 0.2% in May. Falling prices for food, tobacco, and energy led the overall June decline, which pushed the 12-month inflation rate for producer prices down to 1.5%, sharply below the 2.4% clip in April.

Moreover, the recent runup in commodity prices does not reflect any deterioration in the bright inflation outlook. It stems from the flood-related jump in grain prices and a rise in gold prices largely unrelated to inflation expectations. Elsewhere, prices for industrial commodities, the

best gauges of emerging price pressures worldwide, are going nowhere.

Indeed, the forces restraining U. S. inflation are not just domestic. They're global. Inflation in the seven largest industrial economies is running at less than 3%, and it will slide even lower, because of slow growth or outright recessions hitting the major nations.



International economists at Merrill Lynch & Co. say the Group of Seven currently has a combined gap between actual and potential gross domestic product of 4%. They forecast that the gap will widen to 5% by yearend, implying a growing excess of labor and industrial capacity, virtually precluding any buildup of demand- or cost-related price pressures.

Another reason inflation should stay low is the resistance that businesses face in marking up prices. Consumers have become more price-conscious. And even though households are likely to increase spending by a healthy pace of 2½% or 3% in the second half, shoppers will continue to pass up expensive goodies.

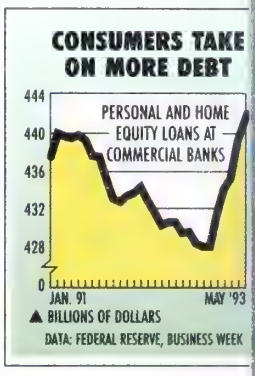
MORE SHOPPING, MORE IOU'S

Consumers' willingness to spend was apparent in the retail sales data for June (chart). Retail sales rose by 0.4% last month, and the April and May increases were both revised upward. Those gains—along with declines in goods prices in May and June—mean that real retail volume grew at an annual rate of 5.2% in the past quarter, following a 1.1% drop in the first quarter.

Big sales increases were posted last quarter at car dealers and at furniture and department stores. And readings for early July look favorable, judging by reports from retailers and by car and truck sales.

Why are consumers spending again? Better-looking ei ployment prospects are one reason. The U. S. economy h already generated nearly 1 million new payroll slots th year, and that has lifted income growth. Moreover, joble claims are trending lower, while the Conference Board's i dex of help-wanted advertising rose in May to its highe level in 2½ years.

Another factor sprucing up the outlook for consum spending is the resurgence in borrowing. After pari down debt for two years, consumers are using cred cards and taking out bank loans again (chart). In May, i stallment debt dipped for the first time in nine month falling $802 million. But that small decline followed lar gains of $3 billion in both March and April.



Consumers may be borrowing again because they have tidied up their balance sheets considerably. Financial assets of households have been growing at more than twice the pace of liabilities for two years. And the stronger housing market means that the major asset of most consumers—their house—is worth more, even as lower interest rates have helped homeowners refinance mortgages and cut their monthly payments.

Also, the borrowing moratorium of the early 1990s h reduced the monthly payments on other IOUs. Househo debt service stands at about 16% of disposable incon now, down from 18.5% in mid-1990.

Financially stronger consumers will help to lift ec nomic growth in the second half, even as the Fed mai tains its price watch. Like a meteorologist scanning t skies for approaching storms, the central bank will rema alert to any signs of inflation. Despite July's floods a soaring mercury, though, there just aren't any price pre sures in the forecast.

THE WEEK AHEAD

HOUSING STARTS

Tuesday, July 20, 8:30 a.m.

Housing starts probably edged up to an annual rate of 1.25 million in June, from 1.24 million in May, says the median forecast of economists surveyed by MMS International, a division of McGraw-Hill Inc. That's suggested by the flat reading of total hours worked in the construction industry in June. The MMS economists also forecast that building permits rose to a 1.18 million pace last month, up from 1.12 million in May. Despite the lowest mortgage rates in 21 years and extremely lean supplies of unsold houses, builders were cautious about new projects in the spring. June may be the month when starts break out of their 1.2- to-1.25 million range and post a large increase. The most optimistic MMS forecast expects that starts increased by 5%, to hit 1.3 million in June.

INITIAL UNEMPLOYMENT CLAIMS

Thursday, July 22, 8:30 a.m.

New filings for state unemployment-insurance benefits probably increased to about 350,000 in the week ended July 17. Filings dropped to 327,000 in early July, the lowest weekly pace in five months. The forecast period, however, follows the week that includes the Fourth of July holiday, when state offices were closed, so some bounce-back is expected. Even so, claims have been heading down since the middle of June, an indication that the labor market is strengthening.

FEDERAL BUDGET

Thursday, July 22, 2 p.m.

The MMS survey forecasts that the fede al government had a $9 billion surpl for June. That would be better than t $3.8 billion surplus in June, 1992, a the $2.6 billion deficit a year earlie The June surplus would mean that, the first nine months of fiscal 1993, t federal deficit is running about $25 b lion below the same period of fiscal 19 Higher tax revenues—a result of stron er economic growth—are bolsteri Washington's finances. For the fisc year ending in September, the defi may well come in at less than $300 b lion, and not much above last year's re ord $290.1 billion.

5 CARAT, FLAWLESS DIAMOND: $250,000

5 CARAT, FLAWLESS DIAMOND: $250,000

10 CARAT, FLAWLESS DIAMOND: $1.0 MILLION

WE'RE PLEASED TO ANNOUNCE THE MERGER BETWEEN
MELLON BANK CORPORATION AND THE BOSTON COMPANY

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CLINTON'S TRADE ROUTE

HE SEES NEW JOBS IN OPEN MARKETS—IF HE CAN GET ALL THE PLAYERS TO AGRE

During the campaign, he pledged to be the "Domestic President," flogging George Bush for his fascination with foreign affairs. But as Bill Clinton settles back into the Oval Office after a well-scripted Asian tour, his economic policy is taking on an increasingly global cast. With growth sluggish at home and job creation lagging, Administration officials now concede that the key to the President's pledge to create millions of new, better-paying jobs depends on finding new markets overseas.

Meet Bill Clinton, International President. During the next few weeks, Washington will be dominated by congressional wrangling over final details of Clinton's economic plan. But Clinton is already looking beyond Capitol Hill to a trio of key trade pacts (table) that promise far more stimulus than the modest investment initiatives in his budget. "We have entered an era where the line between our domestic policy and our foreign policy has completely evaporated," the President says. "We cannot grow unless all the world grows."

That message echoed through the halls of Japan's Akasaka Palace, site of the July 7-9 economic summit. It propelled the timid, politically battered heads of the Group of Seven nations to strike a deal to eliminate tariffs on a wide range of manufactured goods. "They bit a bullet instead of a marshmallow," says a U. S. summiteer.

While only a modest step, the trade accord was an act of political courage for a group of leaders who face high unemployment at home and growing clamor for protection from foreign competition. The G-7 heads stood up for expanding trade and open markets. An aberration? Hardly. Clinton has embarked on a high-risk strategy to make trade a centerpiece of his economic policy. And despite a history of mushy trade compromises and failure, he's willing to gamble that prospects for success are brighter than perennial cynics think.

The summit agreements breathe new life into efforts to complete by December a new General Agreement on Tariffs & Trade, which could boost export growth by eliminating barriers to a wide array of goods and services. And U. S. executives' guarded hopes of expanding exports to Japan were bolstered after the summit, when Clinton and Japan's Kiichi Miyazawa announced a new "framework" for U. S.-Japan talk aimed at opening Japanese markets.

Closer to home, Clinton is no longe waffling on the North American Fre Trade Agreement. Spurred on by a cou ruling that could fatally delay conside ation of the pact, the President w make a major push late this year to w congressional approval of NAFTA.

Clinton's three-front trade blitz w

LIGHTING A FIRE UNDER TRADE TALKS

Since taking office, the Clinton Administration has made real progress on all three main fronts of U.S. trade policy

DATA: BUSINESS WEEK

Talks during the G-7 meeting stopped short c setting numerical goals on ma access. But negotiators did set a new fram work that measures progress in opening markets Japanese officials hint that they may use the deal to stonewall on further concessions. Follow-through will be ke and U.S. officials vow that Clinton will be relentless in gettin increased market access.

a tough sell. Exposure to a ferocious-competitive global economy is a chill-g prospect for many American work-s. They fear that they'll lose jobs cheap labor in the Third World and at foreign concerns will continue to ke over such American icons as Rocke-ler Center and 7-Eleven convenience ores.

But on balance, expanded trade offers e best hope for growth in mature onomies such as those in the U. S., rope, and Japan. The Clintonites, med with sheaves of statistics, are de-rmined to make the case: Since 1987, ports have accounted for more than e-third of U. S. economic growth and o-thirds of all new domestic jobs. nce 1991, the biggest percentage gains ve come not from rich markets such Germany and Japan but from devel-ing economies such as China and Mex-. And experts predict that the future lds even more promise for U. S. ex-rts as capitalism blooms in Eastern rope and economies from Southeast ia to Latin America take off.

For Clinton, the most appealing part is at jobs created by exports pay higher wages than jobs rooted solely in the domestic economy—13% higher in the U. S. on average, according to the Commerce Dept. "Trade not only creates jobs—it creates good jobs," says Robert D. Hormats, vice-chairman of Goldman Sachs International Ltd.

REALITY CHECK. But it will take more than salesmanship and statistics to win breakthroughs on trade. Although opening markets to foreign competitors is appealing in the abstract, the political reality is that powerful protected interests at home—from French farmers to American textile makers to Japanese financial-service firms—will take a beating. "Nobody should overstate what happened in Tokyo," warns U. S. Trade Representative Mickey Kantor. "We still have a lot of tough negotiating to do."

NAFTA holds the key to having all the trade pieces fall into place. But Clinton faces a daunting task in winning congressional approval: With opponents ranging from trade-baiter Ross Perot and consumer advocate Ralph Nader to labor and environmental groups, he must make a populist case that U. S. jobs created by the accord will more than offset jobs lost to Mexico. Clinton plans to follow Jimmy Carter's example with the Panama Canal treaties, running the equivalent of a full-fledged political campaign to win over Congress. And he can probably pull it off. "The votes will be there, but only with a lot of work," says Bush Administration trade negotiator Robert C. Fisher.

A NAFTA victory would give Clinton critical momentum to force a yearend GATT deal. GATT has been stalled for years by France's insistence on protecting its farmers. But senior U. S. officials tell BUSINESS WEEK that Paris is privately angling for a last-minute concession that will enable it to agree to deep cuts in agricultural subsidies. Indeed, French President François Mitterrand mused aloud in Tokyo that he was "willing to try anything" to stem rising Eurosclerosis. With its economy in recession, France can't afford to scuttle GATT. "The pressure is on France," says Stephen Woolcock of the Royal Institute of International Affairs in London.

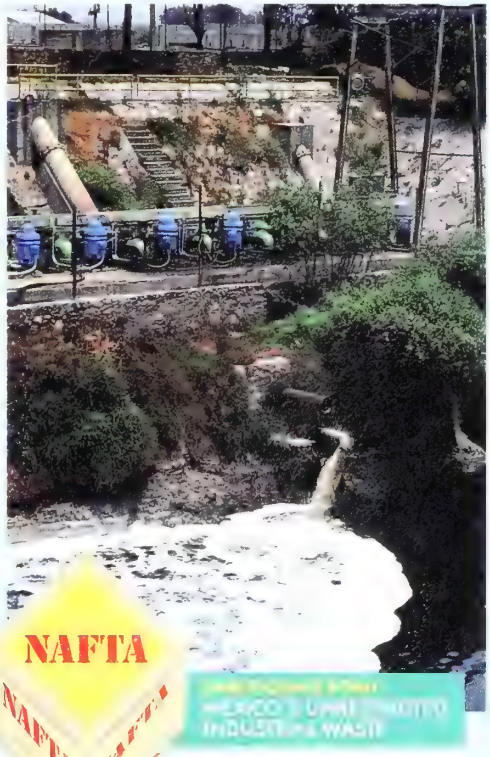
The toughest nut to crack remains Japan. Tokyo wouldn't publicly agree to specific numerical targets for opening its markets to foreign goods. And Clinton's framework "seems rather vague," says General Motors Corp. CEO Jack Smith. In fact, one Japanese official scoffed that the framework was "a start" that might have no end.

But U. S. officials contend that far more progress was made behind the scenes. Senior negotiators say Tokyo struck a secret understanding: It admitted the need for change, conceded there would be some specific goals, and even discussed numerical goals for some sectors. Now, says a top U. S. bargainer, "we have to be relentless in following through."

This is not the first Administration to make such a vow. But rarely has a President been under such pressure to use trade policy to solve a major domestic dilemma. Clinton has come a long way from the candidate who cringed at the mention of foreign affairs. He now realizes that trade comes down to a single four-letter word: jobs.

By Douglas Harbrecht in Washington and Owen Ullmann in Tokyo, with Bill Javetski in Paris and Zachary Schiller in Cleveland

A tariff-lowering deal negotiated during the G-7 meeting in as a modest breakthrough. But nuts, such as ending European ural subsidies and opening up the l-services market in Japan, remain ed. After seven years of stalemate, obably will die if there's no overall ent by yearend.



Clinton could still save NAFTA with a big push for congressional passage this fall. A June 30 ruling by a federal judge calling for an environmental-impact statement on NAFTA has galvanized the White House to begin serious work on supplemental side accords that will make the pact more attractive to voters.

WALL STREET

A WAKE-UP CALL FOR THE M&A CROWD

It's not quite the boisterous '80s, but activity is picking up lately

Damon Corp. was ripe for the picking: It held a strong franchise in the medical-testing segment of the hot health-care industry as well as $170 million of hobbling debt from its 1989 leveraged buyout. Rival National Health Laboratories Inc. took the bait, making a $280 million offer in June. Ten days later, normally conservative Corning Inc., which had been eyeing Damon for years, jumped in with a decisive strike—a $401 million cash offer of its own. Done deal. "We didn't want to get into a highly publicized bidding contest," says E. Martin Gibson, chairman and CEO of Corning's lab-testing business.

RJR-Nabisco it wasn't. Indeed, only with a monumental leap of imagination could this miniwar be likened to the bid-'em-up days of the 1980s. But to Wall Street investment bankers, many of whom have spent more time sharpening up their golf games than doing deals in the past three years, these are hopeful times. "I'm doing 14 deals right now," says Los Angeles investment banker Lloyd Greif. "Last year I was doing five." He's not alone: U. S. merger-and-acquisition activity is up nearly 40% so far this year, to a healthy if not giddy $87.5 billion, according to Securities Data Co. (chart).

OFF THE FENCES. The reasons? Investors and lenders—banks, pension funds, and mutual funds among them—have returned to the M&A fray, swelling the pools of capital in their hunt for higher returns. And a robust stock market is making stock swaps far more attractive. Witness the proposed $1.4 billion stock deal, announced on July 12, that will join the nation's two largest home shopping networks, QVC Network Inc. and Home Shopping Network Inc. (page 54). Nearl one-third of the year's top 35 deals s far have involved at least some stoc swaps, according to Securities Data.

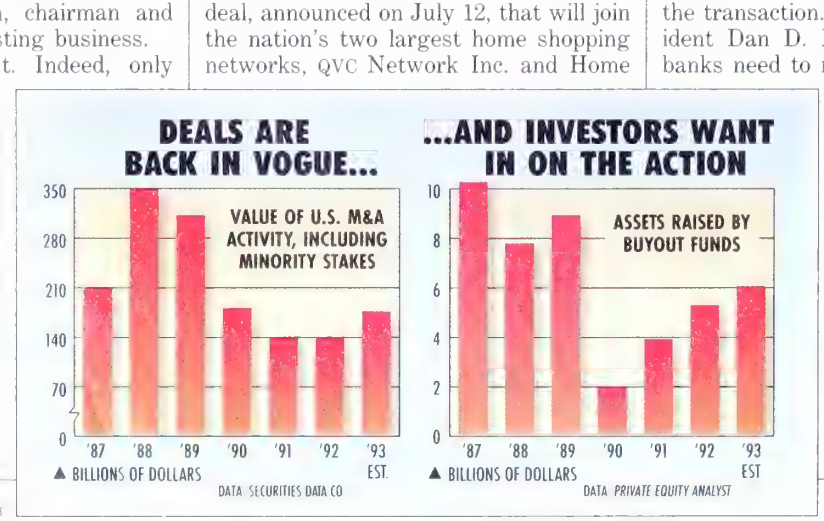
But the catalyst for much of the dea making has been a weak but sustaine economic recovery that has turned man fence-sitters into active acquirers. I vestment bankers say the recognitio late last year that the economy had st bilized encouraged executives to shi gears from survival mode to growt For some, it's easier to buy growth tha generate it internally. That's one reaso for the interest in Medco Containmer Services Inc., a mail-order drug compan that is talking to several suitors—inclu ing, possibly, Merck & Co. (page 29).

No one predicts another M&A boon The multibillion-dollar deals of the '80 are still a rarity, because lenders no require more equity than they did fiv years ago—typically, at least 25%. Man banks, chastened by losses in the las merger rush, are reluctant to take o huge deals, even in syndicates. An more than a few people still worry tha the fragile economy could once more sli backward, shutting off the deal flow a quickly as it did in 1989.

Even so, the money is coming back The recent sale of British Petroleum' animal feed business attracted not onl industry buyers but 30 financial bidder as well. An investor group led by th Sterling Group, a Houston buyout firn won the battle, for $425 million. "It' incredible that for a deal that size, 3 financial buyers would have the equit to do it," says Jeffrey R. Sechrest, th co-head of M&A at Lehman Brother which represented one bidder.

HUNGRY FOR JUNK. With cleaner balanc sheets and shored-up capital bases, som commercial banks are lending agair When Martin Marietta offered to bu some General Electric aerospace asset for $3 billion, BankAmerica and J. P Morgan quickly came up with the $2. billion in senior debt needed to complet the transaction. BankAmerica Vice-President Dan D. McCready says that th banks need to make those loans to sup plement lines of business such as real estat lending and credit card that have become les profitable.

At the same time mutual funds hungr for high yields ar snatching up jun bonds as quickly a they hit the market And commercial financ companies such a Greyhound Financia are competing for less



sky loans, providing more senior debt midrange deals than in the past. "The mpetition today is getting as fierce as was in the late 1980s," laments Les J. eberman, executive managing director ith Indosuez Capital, which has been aking M&A loans since April of 1992.

What's driving many investors is an creasingly firm belief that the stock arket can't continue to provide the gh returns of the last decade. That's e reason American Airlines Inc.'s pen- on fund decided to pump $120 million to buyout funds during the past two ars. Tom K. Lynch, a principal with pension fund adviser Wilshire Associates, says most funds are underinvested in riskier—and higher-yielding—funds. "They're saying: 'Where do I replace those double-digit returns I got in the '80s?' " he explains.

In the end, though, the deals still have to make some sense. Indeed, perceived efficiencies and shared resources are at the heart of most of these mergers—most notably in telecommunications, where regulatory and technological shifts have made it nearly imperative for companies to seek strategic partners. U. S. West Inc. bid $2.5 billion for a 25% stake in Time-Warner's cable and film business in May. Two weeks later, British Telecommunications invested $4.3 billion in long-distance carrier MCI Communications. Both deals matched partners preparing for the advent of fiber-optic technology.

Both transactions, too, yielded the big-time fees investment bankers love. Hear the creaking? That's Wall Street learning to smile again.

By Amy Barrett in Los Angeles, with Leah Nathans Spiro and Kelley Holland in New York, Mark Maremont in Boston, and bureau reports

EAKTHROUGHS

QUIBB TAKES DEAD AIM T CANCER

s researchers may have hit on a mix that could stop the killer

Scientists long have dreamed of designing potent anticancer ugs that could home in tumors without harm- healthy cells. The fu- re looked bright in 1975, nen researchers found a bel prizewinning way to ake large quantities of -called monoclonal anti- dies, specialized versions the body's own intruder- ghting substances. In eory, combining a toxic varhead" with an anti- dy "guidance system" ould create a weapon at could deal a death w to cancer cells. But for years such mart bombs" mostly have turned out be duds.

Now, nearly two decades of research e beginning to pay off. In the latest vance, reported in the journal *Science* July 9, a team of scientists at Bristol- yers Squibb Pharmaceutical Co. com- ned an antibody and a cancer drug to re rats and mice afflicted with human ng, colon, and breast cancers. "We fi- lly think we have something interest- g," says Dr. Karl Erik Hellström, one the team's leaders.

The Bristol-Myers ex- riment isn't the only en- uraging advance. Late st year, Cytogen Corp. in rinceton, N. J., received od & Drug Administra- n approval to market e first monoclonal-anti- dy-based product. In- ead of carrying a drug, e antibody carries a radioactive marker to colon and ovarian tumors, allowing doctors to make more precise diagnoses of the cancers. Immunomedics Inc. in Morris Plains, N. J., has similar products awaiting approval. Cytogen and Immunomedics, as well as other companies and research centers, also are already testing experimental monoclonal therapies in people. Furthest along are efforts that use combinations of antibodies and radioactive isotopes to seek out and kill leukemia and lymphoma cells, which are easier to attack than solid tumors. "Based on our studies in leukemia, I would like to think that we are close to a drug," says Dr. David A. Scheinberg, chief of the leukemia service at Memorial Sloan-Kettering Cancer Center in New York.

CHEMICAL GLUE. What the Bristol-Myers study showed was that monoclonals could also kill common solid cancers—at least in animals. "It's a shot in the arm for the whole field," says Dr. David M. Goldenberg, chairman of Immunomedics. The secret was a particularly ingenious strategy. First, Hellström and his team created an antibody that not only seeks out cancer cells but, after attaching to a cell's surface, is swallowed. The Bristol-Myers approach makes it possible to deliver the drug where it does the most harm to the cancer—inside the cell. Scientists have tried to do this for years, but finding the right antibody to make it work has been tough.

The Bristol-Myers researchers also used a clever chemical glue to attach the drug—a common anticancer agent called doxorubicin—to the antibody. The glue holds the toxin tightly as the antibody zips through the body, preventing the drug from killing sensitive heart and bone-marrow cells. Once inside the cancer cell, a more acidic environment breaks the bond, releasing the drug to do its lifesaving work. That's why "our results look better than anyone else's," says Hellström.

Still, it's a long way from lab to hospital. The next step is for Bristol-Myers to get FDA permission for clinical trials on humans. "Until it's actually been in patients, we just don't know if it will work," cautions Hellström. One major worry, for example, is that the antibody's guidance system may not be precise enough. In addition to homing in on tumors, the monoclonal antibody also attaches to cells in the digestive tract. If enough of these cells are killed, the result would be dangerous and unpredictable side effects.

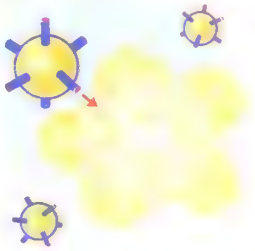
Scientists also worry that the monoclonals could prove to be too apparent to the body's defense system, and thus could be counterattacked before they can deliver their drug payload. That's why researchers at a number of companies are using genetic-engineering techniques to make the antibodies less easily spotted by the body. "We still have a way to go to make silver bullets" against cancer, says Goldenberg. What we have now are "bronze bullets," he says. Still, they may be aimed true enough to slow cancer in its tracks.

By John Carey in Washington

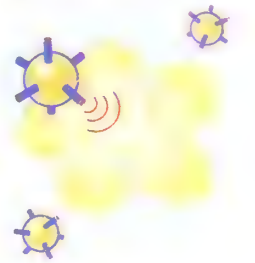
A MAGIC BULLET?

How Bristol-Myers Squibb's approach works

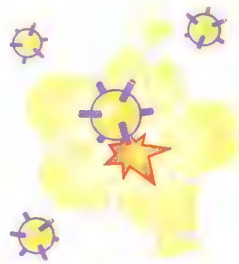
1 Monoclonal antibody, with drug attached, seeks out cancer cell



2 Cell pulls antibody and drug into itself



3 Drug is released, killing cancer cell



DATA: COMPANY REPORTS

ILLUSTRATIONS BY ALBERTO MENA B.W.

EXECUTIVE SUITE

SUMMERTIME—AND CEOs ARE SWEATING

Boards, shareholders, and the marketplace turn up the heat

Summer, bloody summer.

Uneasy rest the heads that carry the crowns in executive suites across the country. In unprecedented numbers and various ways, top executives are tumbling. If it's not employee disgruntlement forcing out Archibald Cox Jr., chief executive of First Boston Corp., it's a family feud at Dart Group, or board uprisings at Eli Lilly and Giddings & Lewis. Then there are the abrupt exits of heirs apparent such as Richard J. Markham at Merck, Christopher Steffen at Kodak, or Ervin Shames at Stride Rite. Tambrands, JWP: The list expands.

Unlike the winter flurry of board coups, in which chiefs at GM, IBM, and American Express lost lengthy power struggles, change now blows in as suddenly as a summer storm.

In some cases, confusion reigns in its wake. After the surprise ouster of Eli Lilly & Co. CEO Vaughn D. Bryson on June 25, employees staged an impromptu protest at headquarters, never mind Lilly's lackluster performance under the fallen leader. At Giddings & Lewis Inc., instead of hanging crepe, employees seemed inclined to hang in effigy their former chief, William J. Fife Jr. But shareholders and distributors, who favored G&L's fat profits and strong service under Fife, were praising his legacy, not burying it.

The combustible combination of independent boards, active shareholders, and fast-changing markets seems likely to keep exploding the status quo. In the early stages of this transformation, here's how the churning is done:

THE BIG EXIT

Andrew Dwyer

That's what happened to Andrew T. Dwyer of Rye Brook (N.Y)-based JWP Inc. After a decade of acquisitions, JWP's chairman and chief executive had built the former water-supply company into the country's largest electrical and mechanical contractor and moved into computer retailing in a diversification effort. But, according to a shareholder lawsuit, JWP under Dwyer failed to keep adequate financial controls. The board stuck by Dwyer at first, but when JWP's lenders balked at negotiating with him on a restructuring loan, Dwyer left the company on June 29. He could not be reached for comment.

The bell also tolled suddenly for G&L's Bill Fife. Few argued with his record for boosting the machine-tool maker's sales and earnings in a tough economy. But Fife had flaws. His board questioned some deals he made, and disgruntled executives complained secretly to directors about his hard-charging style. The result: He resigned abruptly on Apr. 26.

Even hand-picked—and pampered—directors are fast becoming a force for change in the corner office. At Tambrands Inc., Martin F. C. Emmett treated board members well, and they returned the favor—giving Emmett a big bonus early this year. But Tambrand's board pushed him out after his strategy of raising prices on Tampax-brand products failed and earnings fell.

RAISED UP, RIDDEN OUT

Vaughn D. Bryson

Succession is among the most important decisions that CEOs make. And making succession plans that stick, it seems, may be among the most difficult. Merck & Co. Chief Executive P. Roy Vagelos found that out when he elevated Richard J. Markham to Merck's No. 2 spot seven months ago, bypassing several rivals. Markham quit after becoming isolated in Merck's top ranks, leaving Vagelos without a clear successor (box).

Lilly's Bryson was more than an heir apparent. He was the chief. But his predecessor Richard D. Wood remained an activist chairman of the board. When Bryson changed the corporate culture, tearing down Lilly's hierarchical structure in favor of a more collegial approach, Wood orchestrated Bryson's ouster, over strident objections of at least two inside directors. Wood couldn't be reached. But one Lilly director called it a "sign of the times, in our industry and in our boardroom."

FAMILY FEUD

Herbert Haft

Herbert and Robert Haft had much more in common than genes and swept-back manes of bushy hair. They seem to have a vision for Dart Group's future that included Robert eventually taking over from his 72-year-old father. Former Dart director James G. Leonard says Herbert "would literally extol his son. He was sickly sweet [about Robert]. Syrup just came out all over."

It's vinegar now. When Robert began taking on more responsibility, and acknowledging his leadership role to the press, Herbert exploded. On July 5, after using the clout of his 57% stake in Dart to purge the board of his wife, Gloria, his son, Robert, and three apparent sympathizers, Herbert finally ousted Robert from the corporate suite. And the breach seems final: Robert is out looking for a new job, perhaps running a retail company. He also has spoken with lawyers about suing to recover lost wages. "I don't understand how Gloria and Herbert can live in the same house," says Leonard. "I guess it's a big house." The elder Haft couldn't be reached for comment.

HELLO, GOODBYE

Christopher Steffen

Not everybody leaves under a cloud. Some top executives go at their own behest, sometimes abruptly. When corporate nomad Christopher J. Steffen came

Eastman Kodak Co. as chief financial ficer, it appeared he finally had found ospects befitting his lofty ambitions. even weeks later, he left, evidently ssatisfied with the amount of clout he d at Kodak. And at Stride Rite Corp., ief Executive Ervin R. Shames left ddenly on June 27, forcing retired ex- utive John J. Phelan to fold his lawn air and return to run the company til a permanent replacement emerges.

FOLLOW THE LEAVERS

Archibald Cox Jr.

chibald Cox Jr. now knows how sud- nly fortunes can change. Just weeks o, the chief executive of First Boston s set to head the company's securities d investment banking operations. But st Boston employees, angered at their atively low raises after Wall Street's cord year, kept leaving in droves. For- r executives say Rainer E. Gut, chair- an of First Boston parent Credit isse, intervened on July 13 and Cox s out. His defenders say Cox was nev- given the budget needed to stop the ent drain.

ere may be costs to this unsettled, metimes troubling new era. Jeffrey nnenfeld, a professor at Emory Uni- rsity's business school, says the lack CEO security may prompt managers to come too cautious. "It can hurt long- m risk-taking," he warns. "You need ople to keep pushing the edge." But after decades of docile directors d inbred decision making, many wel- me the fresh air. "There ought to be re churning at the top," exclaims bert B. Duncan, professor of strategy d organization at Northwestern Uni- rsity's J. L. Kellogg Graduate School Management. "I don't think we get of enough of these guys." Moreover, ds Thomas J. Neff, president of head- nters Spencer Stuart & Associates, ere billings are up more than 30% this ar, there's one way to avoid the ax: he best insurance against change at e top will be focusing on perfor- nce."

In this bloody summer, top executives o forget that advice seem sure to give w meaning to an old pledge: The king dead, long live the king.

By David Greising in Chicago, with Lori ngiorno in New York, Mark Lewyn in shington, and bureau reports

SUDDENLY, NO HEIR IS APPARENT AT MERCK

In the end, Richard J. Markham's abrupt departure from the No. 2 job at Merck & Co. shouldn't have been a surprise. The 42-year-old marketer had leapfrogged over seasoned rivals seven months ago, when Chief Executive Officer P. Roy Vagelos tapped him as president and heir apparent. A hard-charging salesman, Markham was no scientist in a company dominated by scientists. Worse, he was a maverick who seemed miscast at team-oriented Merck. "He ruffles feathers," says a colleague. "He got into a position of power and strength because he is so assertive, and that turned some people off."

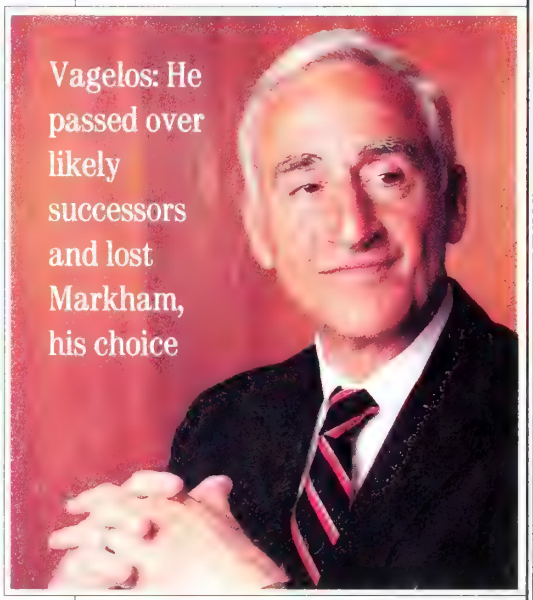
Officially, nobody is saying why Markham quit, as of July 9. He refused to detail his reasons, and Merck would say only that they are "personal." But colleagues and Merck watchers say conservative senior managers, including jealous rivals, may have made it all but impossible for him to succeed.

SALES SAVVY. When Vagelos reached down the ranks to elevate Markham from senior vice-president to president, he riled executives long viewed as potential successors. As a result, "Dick was less than popular" among his colleagues, says one. Among those overlooked by Vagelos, who plans to retire at 65 in November, 1994: Edward M. Scolnick, Merck Research Laboratories Div. president, who was a likely replacement. Scolnick couldn't be reached.

Merck followers believe Vagelos tapped Markham because he wanted an innovator who excelled at sales, a skill Merck will need badly in the health-reform-minded 1990s. With Merck's labs churning out fewer big products and with cost-containment pressures limiting price hikes, the thinking went, Markham would cut deals with big buyers of drugs that would shore up Merck's margins.

Markham, however, may have tried to move too far too fast. Take West Point Pharma Div., which he set up to sell generic versions of Merck products when their patents expire. The move was heretical to Merck veterans, who regard generic drugs as too low-margin to support innovative research. Markham argued that West Point Pharma would capture sales that otherwise would have been lost to rivals.

But Markham didn't want to stop there. One well-placed executive says Markham and some colleagues—working quietly and sharing little information with other insiders—were mulling major acquisitions. Among the candidates was Rugby-Darby Group Cos., a big generics maker that Marion Merrell Dow Inc. agreed to acquire in May. A Rugby executive confirms that his company talked with Merck earlier in the year. Another potential target, analysts say, was Medco Containment Services Inc., the fast-growing, $2 billion-a-year mail-order pharmacy company. Medco officials won't talk about the subject, but Chairman Martin J. Wygod confirmed that his company had held talks with several companies. Merck officials declined to comment.



Vagelos: He passed over likely successors and lost Markham, his choice

JOHN S. ABBOTT

Markham also reversed other cherished Merck practices, such as sticking to one price for nearly all drug buyers. He granted discounts to the Group Health Cooperative of Puget Sound, a big health maintenance organization that refused to deal with salespeople, to protest the no-discount policy. Says Phillip M. Nudelman, CEO of Group Health: "Dick brought a new willingness to collaborate. He was far more customer oriented."

Markham's departure leaves Vagelos in a touchy spot. His successor now will unquestionably be his second choice. And whoever it is, the candidate will have to deal with the fact that the top choice bailed out in a hurry.

By Joseph Weber in Philadelphia

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THE HOUSE NEAR WIESBADEN, GERMANY, WHERE GM DOCUMENTS WERE FOUND; (LEFT) A PROPOSED AUTO PLANT SITE IN LOPEZ' HOMETOWN, AMOREBIETA, SPAIN

IT'S GETTING TOUGHER TO UNTANGLE THE LOPEZ IMBROGLIO

The bitter case could tarnish VW—and reveal GM's strategy in Europe

"In times like these, you need a friend. A good friend," goes Volkswagen's latest German advertising slogan. That's advice that could also apply to the $50 billion German auto giant itself, as Volkswagen sinks deeper into a legal slugfest begun after it hired General Motors Corp. executive José Ignacio López de Arriortua four long months ago.

In early July, German prosecutors revealed that they had discovered GM documents in the home of Jorge Alvarez Aguirre, a former executive at GM's Adam Opel unit in Germany who was recruited to join the ex-purchasing czar at VW. The discovery seems to bolster GM's contention that López and Alvarez stole trade secrets when they left GM—something both adamantly deny. (Six other GM managers also followed López to VW, but there have been no allegations against any of them.) Now, VW CEO Ferdinand Piëch has gone on the counterattack, accusing GM of pursuing a vendetta against López and VW.

There's a lot more at stake than which company will win the upper hand in a lurid corporate feud. GM hasn't implicated Piëch in the affair. But the judgment of the heir to the Porsche car dynasty, who took over as VW's CEO on Jan. 1, will be called into serious question if GM's allegations against López or Alvarez prove true—especially since López has rapidly become Piëch's top lieutenant. And GM, which has been highly successful in Europe, badly wants to make sure that the secrets of its future European strategy aren't compromised.

For now, at least, the U. S. company seems to be gaining an edge in the fight. In late June, the district attorney's office for the city of Darmstadt, which is investigating GM's allegations, raided an apartment building at 44 Alte Dorfstrasse in Breckenheim, a bucolic village near Wiesbaden. At what had been Alvarez' home, they found "four large boxes of documents that should not have been there," says the D. A.'s spokesman, Georg Nauth.

Opel officials are jubilant. "According to its own statements, the Darmstadt public prosecutor's office has made decisive progress in this case," says Opel Board of Supervisors member Hans Wilhelm Gäb. But they also fret over the "highly confidential" nature of some documents that deal with a hush-hush new Opel minicar code-named "the O-car" and plans for a new factory to make it. López had hoped Opel would build the car in a new plant he wanted GM to build in his hometown of Amorebieta in Spain's Basque regio An Opel executive says some of the r covered papers match those "on a list c missing documents" GM has compiled.

VW dismisses GM's allegations. Alva rez, through his Frankfurt-based lawye Eberhardt Kempf, insists there were n Opel secrets among the documents pro ecutors found, many of which, he say are in the public domain. López has lon dismissed any contention that he b trayed GM's secrets as "without founda tion." VW spokesman Lutz D. Schillin adds: "We didn't order up or receive an secret documents."

BASQUE PROMISE. Piëch, meanwhile, in plies that the attacks on López are mai ly motivated by the personal bitterne toward VW of Louis R. Hughes, pres dent of GM's Zurich-based European o erations. Piëch told the German dail *Die Welt* that GM is running "an exclu sively personal campaign" against Lópe by "the guy from Zurich"—a clear refe ence to Hughes. Hughes's motivatio said Piëch: He had applied for the CEO job at VW and failed to get it.

VW spokesman Schilling insists tha Hughes had had "three contacts" wit VW about the CEO's jo the last on Apr. 1, 199 shortly before he wa named to the GM Europ job on Apr. 7. GM says V tried to recruit Hughe twice but that Hughes r buffed VW. Says Hughe "I was approached, bu I immediately made quite clear that I was n interested."

The big question no What move, if any, wi the volatile López mak

LOPEZ: AT THE CENTER OF VW'S INNER CIRCLE

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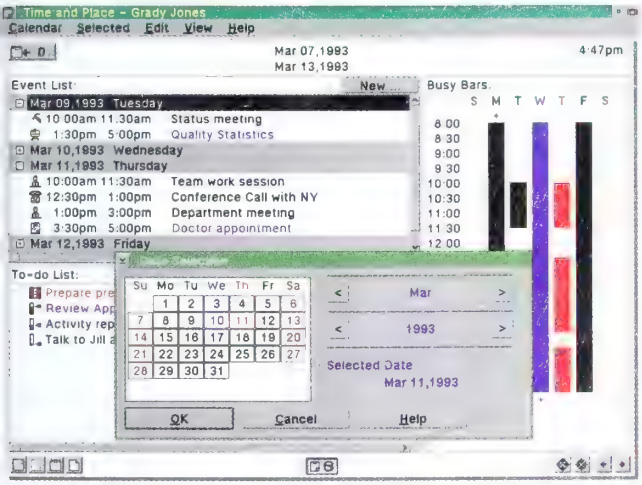

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next? GM executives believe that López shifted to VW largely because GM was leaning against building its O-car plant at Amorebieta. At first, López appeared to have a firm promise from Piëch that VW would build a pilot plant in the Basque region. But Piëch now says that going ahead with the project is "out of the question at this time."

In the meantime, however, López' standing with Piëch seems more secure than ever. On July 2, the day the Darmstadt D. A.'s office announced its raid in Breckenheim, Piëch, effectively pushed aside his deputy CEO, Frenchman Daniel Goeudevert, making López his undisputed No. 2.

Where will it all end? Darmstadt prosecutors haven't yet questioned VW managers, most of whom are now on vacation until Aug. 3. It may take months before there's a clear answer to the questions that have the world's auto makers agog: Who did what and when and was any of it illegal? How those questions are answered could have a profound impact on VW and GM—and on how tightly the world's auto makers protect their most cherished secrets.

By John Templeman in Bonn

SHORTAGES

WHY THE CHIP INDUSTRY COULD GET SCORCHED

A fire in a key Japanese packaging plant may cut global production

Ordinarily, an industrial accident in a remote Japanese village wouldn't cause a stir across the Pacific. But when an explosion on July 4 gutted a plastics plant in Niihama, on the island of Shikoku, the entire global semiconductor industry felt the shock. The factory, belonging to Osaka-based Sumitomo Chemical Co., produced about 60% of the world's supply of epoxy resins used in the plastic packages that permanently house most semiconductors.

At first, chip executives fretted that shortages of resin would cripple some semiconductor production lines. Now, they're breathing easier, figuring they have two to three months of inventory available. Still, unless other suppliers ramp up production quickly, tight supplies of plastic packaging could drive up prices of dynamic random-access memories and other chips by as much as 30% by yearend. That could badly hurt big chip buyers such as U. S. computer companies, which are struggling to cut costs. At best, says Steve Myers, who is an analyst with Jardine Fleming Securities in Tokyo, "it's a serious inconvenience."

UNCERTAIN FATE. U. S. chip companies, including Intel, Micron, Advanced Micro Devices, and National Semiconductor, have rushed to reassure customers that they have adequate inventories. Japanese DRAM giants Toshiba Corp. and NEC Corp. also insist that they are covered through early fall. PC makers so far seem unruffled: "It appears that there's a sufficient pipeline of those materials," says Michael S. Dell, CEO and chairman of Dell Computer Corp. In private, though, some are less sanguine. "This is really a crisis," says one Japanese chip company executive. "Japanese manufacturers are all trying to keep it quiet. But no company has sufficient inventories."

Right now, the biggest problem is the uncertain fate of the Sumitomo plant itself. Police have sealed off the Niihama facility while they investigate the cause of the explosion, so Sumitomo can't assess the damage or predict how quickly it can rebuild. Three other Japanese companies producing smaller quantities of high-grade resin could pick up some of the slack, and Dow Chemical Co. and Swiss-based Ciba-Geigy Ltd. also have the knowhow. But the resins business has notoriously low profit margins. No company wants to shell out millions of dollars to crank up new facilities, only to see Sumitomo come roaring back in six months or a year.

Even Dow, which was driven out of the market by a price war in early 1992, can't easily reenter the business. Chip manufacturing is nothing if not a precise science, and the faintest trace of chloride or other contaminants can lead to corrosion and malfunction. As a result there's a "qualification" period of up to three months for monitoring all materials purchased from a new supplier. Not everyone is convinced new entrants will brave that vetting. "The biggest concern," says S. G. Warburg Securities (Japan) Inc. senior analyst Chuck Goto, "is whether new sources of resin can be found and whether chip companies can respond fast enough in getting them approved."

"WINDFALL." Sumitomo President Akio Kosai hopes they can. In an attempt to support customers and fend off criticism, his company has asked Dow, Ciba-Geigy, and Nippon Kayaku Co. to begin or increase production to fill the gap. Japan's Ministry of International Trade & Industry is quietly lobbying for the same solution. But executives at Dow, for one, say they haven't decided whether to get back into the market.

If they choose not to, the Sumitomo explosion could actually end up benefiting Japanese and Korean chipmakers. The industry is on the verge of a glut in memory chips, because over the next six months as many as three huge wafer-processing plants will come on stream in South Korea and Singapore. Many of those chips won't reach the market right away if there aren't plastic packages to put them in, and that could keep prices high. Especially if large customers in America try to lock in long-term contracts at current prices, "there could actually be a windfall for Japanese chipmakers," says Warburg's Goto.

Such effects won't last forever. Even worst-case scenarios acknowledge that Sumitomo will return to capacity within 18 months. Nevertheless, for the next year or so, tremors from the explosion in Niihama may continue to be felt around the world.

By Neil Gross in Tokyo, with Robert D. Hof in San Francisco

That little map wasn't
worth two dead flies.

You said turn left.

Right like turn right
or right like not wrong?

Right.

You know what I mean.
See ya at the clubhouse.

When you want the convenience of a cellular phone, you need the quality of a Motorola.

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STRATEGIES

WELLCOME'S AZT FACES ATTACKS ON TWO FRONTS

Both its patent and its clinical reputation are being assaulted

The high-profile AIDS drug AZT has long been a mixed blessing for Wellcome PLC. Soaring sales have pumped up Wellcome's profits since 1987 and bolstered a $3.24 billion sale of the company's stock a year ago. But Wellcome has also weathered intense scrutiny for what critics call unfair pricing of AZT. "Being identified with AIDS has not made life easy for them," says one big investor.

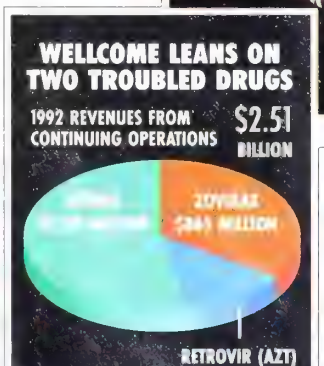
It's not getting any easier. AZT patents held by Burroughs Wellcome Co., the British company's U. S. subsidiary, are under attack from generic drugmakers, most recently in a North Carolina jury trial that began on June 30. And new clinical studies, which are known as the Concorde trials, suggest that AZT may not help HIV-positive patients who take the drug before they develop symptoms. The likely upshot: Even if Wellcome maintains its patents, the role of AZT as the dominant treatment for HIV-infected people is diminishing, according to Dr. Anthony S. Fauci, director of the National Institute of Allergy & Infectious Diseases.

That's bad news for Wellcome. AZT, its second-best-selling product, accounted for 13% of sales last year (chart). Wellcome, though, says the AZT problems are being overplayed. "I do feel that people don't look at the rest of our portfolio," complains Dr. Trevor Jones, the company's director of British R&D. That might be a good thing, since Wellcome's portfolio has some other big problems: Patents on Zovirax, a herpes medication that contributed 34% of 1992 sales, will begin to expire in Europe this year, leaving it vulnerable to low-cost generics.

All that hasn't helped Wellcome's share price, which has dropped 14% since Apr. 1, to $9.81, below last year's offering price of $12. The shares likely will stay soggy until the North Carolina trial ends, which won't be until mid-August, at the earliest.

The trial will resolve a suit brought by Wellcome itself, seeking to prevent generic drugmakers Barr Laboratories Inc. and Novopharm from producing knockoff versions of AZT. Barr and Novopharm, supported by the National Institutes of Health, allege the patents are invalid because Wellcome failed to credit NIH researchers as co-inventors. Wellcome's Jones denies the NIH scientists' involvement in AZT's invention and says "we feel we have a very good position."

Analysts figure Wellcome likely will win its suit. If not, the lost profits would be substantial: Novopharm and a Barr subsidiary already sell generic versions of AZT in Canada, at about half Burroughs Wellcome's treatment price of $2,100 per year, and say that U. S. discounts would be similar. Lehman Brothers analyst Jo Walton figures that if Wellcome were to pull out of the U. S. following a negative trial verdict—a worst-case scenario—its earnings growth would drop to 13% through 1996, from her current estimate of 16%.



AZT HAS GARNERED HEALTHY PROFITS—AND ANGRY PROTESTS OVER ITS PRIC

A CHOICE. Less certain is the impact of the Concorde trials' findings. AZT has been widely prescribed for patients who show no AIDS symptoms but whose immune systems are weakening in the belief that early treatment could slow deterioration. Data from the Concorde trials "has punctured exaggerated expectations for AZT," says Richard Peto, a Oxford University professor and an ad viser to the trials. In late June, an NI panel concluded that while AZT shoul remain the first-line treatment for HIV infected people, doctors may conside not using the drug for patients not ye showing symptoms.

Only an estimated 1% of infected pe ple in the U. S. currently receive AZ leaving a massive potential market ur tapped. Before the latest trials, patient without symptoms were expected to ac count for 20% of U. S. sales by 199 according to Lehman's Walton; now their share probably will stay at 8% That would cut into profit growth. Est mated aftertax profits from the dru totaled $590 million from 1987 throug 1992—59% of total company profits i that period—according to Thoma McLaughlin at the Harvard medica school. Wellcome won't reveal actua profits.

Profits from Zovirax are expected t suffer as well. The drug's patent expire in Germany in late 1993, in Britain an France in 1995, and in the U. S. in 1997 Also, it is facing competition from a ne SmithKline Beecham PLC drug. Well come is now working on new formula tions and plans to aggressively push it over-the-counter version.

There's some good news. In its pipe line, Wellcome has a breast-cancer drug Navelbine, whose sales could reach $10 million by 1998, analysts figure. The company rolled out a potentially bigge drug, hepatitis antiviral Wellferon, i 1990. That could bring in up to $180 mil lion in sales by 1996. In other words there's more where AZT came from.

By Julia Flynn in London, with John Carey in Washington and Chuck Hawkins in Atlanta

PHOTOGRAPH: © K. MAMAN-SIGMA, MADE BY USA PHOTO BAMAN INC.

William Tell Monument, Altdorf

Statue of Liberty, New York

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ENTERTAINMENT

WHAT'S WRONG WITH SELLING USED CDs?

The record industry goes to war with retailers that peddle them

Psst. Wanna buy a used CD?

The compact disk, which launched a music revolution a decade ago, has one big advantage over the old LP: It lasts almost forever. Great for consumers, a worry for record companies. Indeed, that crucial feature has triggered an inevitable confrontation, pitting the giant record companies against their retail outlets.

The battle was joined earlier this year when Wherehouse Entertainment Inc., a 339-store retailer based in Torrance, Calif., started selling used CDs side-by-side with new releases—at about half the price. The move by the nation's fourth-largest music chain brought on the wrath of the industry: The distribution arms of Sony, Warner Music, Capitol-EMI, and MCA all have halted their cooperative advertising payments to any retailer selling used CDs. In retaliation, Wherehouse now plans to sue to recoup the ad money.

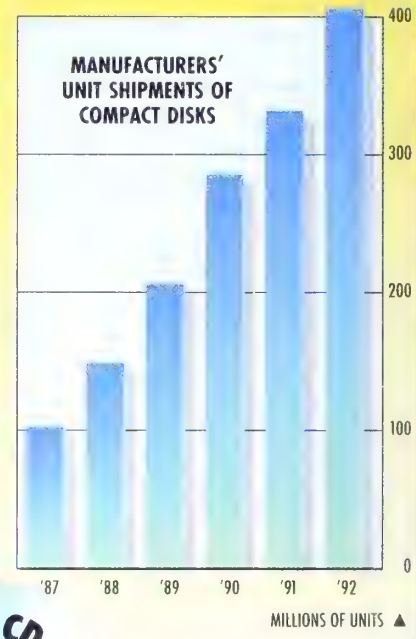
The four companies, which represent three-quarters of the recording industry, claim that while it is legal to resell a copyrighted product, it cuts into sales of new CDs, diminishes their value, and deprives artists of royalties. "We can't do anything to stop them, but we don't have to support them with advertising for a product we didn't sell them," says Paul R. Smith, president of Sony Music Distribution. The point was underscored last month, when Garth Brooks, last year's best-selling artist, announced he would not release his CDs to stores selling used disks.

So far, used CDs have not been a threat to the record companies. Most analysts figure sales of used disks make up less than 1% of the $9 billion U. S. record industry. Meanwhile, sales of new CDs last year climbed 22%, to $5.3 billion (chart). But with one big retailer getting into the business, record producers are clearly worried that others will follow, if only to remain competitive.

HAPPY RETURNS. Wherehouse has long been regarded as one of the industry's innovators. It was one of the first record chains to embrace video rentals and sales in the 1980s. And two years ago, concerned that ever-higher CD prices were turning off buyers, it established a satisfaction-guaranteed policy unheard-of in the industry: Any consumer could return any CD for any reason.

That probably triggered the current flap. Partly as a result of Wherehouse's returns policy, Sony Music Entertainment eliminated all opened returns, giving retailers a 1% credit instead on all CDs purchased. Unable to return opened CDs to Sony, Wherehouse marked them down and put them on sale. "Lo and behold, the customer loved it," says Bruce Jesse, the chain's marketing vice-president.

A WHEREHOUSE OUTLET: USED CDs AT HALF THE PRICE OF NEW ONES



THE CD PHENOMENON

The fight escalated. Wherehouse started testing full used-CD racks in nine of its stores, and the industry retaliated by announcing the restrictive co-op ad policies. Those policies accelerated Wherehouse's move into used CDs: "The new policies put us at a competitive disadvantage," Jesse says. "We have to find out fairly quickly how much business we can do."

It's a battle the big record companies aren't likely to win. Small stores and chains have been selling used CDs and, before CDs, used vinyl records for years without recriminations from their suppliers. "It's like trying to legislate goodness," says Don Rosenberg, president of Record Exchange of Roanoke Inc., a 14-store chain based in Charlotte, N. C. that has carried a mix of new and used products since it was founded 13 years ago. "When you have a durable product with a life beyond the first user, there's going to be a secondary market somewhere," he says.

"NOT COOL." Retailers say that the major record labels should clean their own backyards. Much of their inventory of used CDs comes from record clubs owned by Sony, Warner, and BMG, or from free promotions. "If they're worried about the consumer's perception of the value of their CDs, they should stop selling them through record clubs at eight for a penny," says John Carnahan, president of Northern Lights Music Inc., a Minnesota chain.

The industry can hardly afford to threaten the small, offbeat outlets that whip up interest in new acts. Take the band His Name is Alive from Livonia, Mich. The band's label, 4AD Records Inc., is distributed in the U. S. by Warner, so it had to yank ads it had already booked with San Francisco's Rough Trade Records and run a promotion with giant Tower Records instead. "Not nearly as cool," says Bev Chin, 4AD's director of alternative marketing. And, she says, when the final tally came in, not nearly as effective, either.

By Larry Armstrong in Los Angeles

PHOTOGRAPH BY DAVID BUTOW; BLACK STAR; CHARTS BY USA NOUSE BRAINMAN BW

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EDITED BY JULIE TILSNER

FEW CHEAP SEATS THIS YEAR

In a Galveston (Tex.) court, American Airlines is fighting charges it unfairly cut prices last summer. Certainly, the deals of 1992 are no more. Here's the average cost of a ticket from major U.S. cities:

BUSINESS/CHEAPEST

1992	1993	Percent change
ATLANTA		
$246/$71	$348/$145	42%/104%
DENVER		
$279/$75	$436/$176	56%/134%
KANSAS CITY		
$180/$59	$213/$82	18%/39%
MIAMI		
$275/$75	$394/$146	43%/95%
NEW YORK		
$249/$87	$370/$137	49%/56%
U.S. AVERAGE		
$237/$71	$342/$129	44%/81%

DATA AMERICAN EXPRESS AIRFARE MANAGEMENT UNIT

AN AIRFARE BREAK OUT OF BALTIMORE

▸ Southwest Airlines' East Coast invasion has begun. The airline announced on July 14 that it will start service from Baltimore-Washington International with fares to Chicago and Cleveland well below rivals'. A one-way to Cleveland will sell for just $49. A trip to Chicago's Midway will go for $89. Continental slashed its fares to the two cities the day before.

DELL'S LATEST WRITE-DOWN

▸ More growing pains at Dell. On July 14, the computer company warned that it expects to report a loss of $1.65 to $1.85 per share for the second quarter, thanks to a planned $75 million to $85 million write-down. Analysts had expected Dell to post a profit of 18¢ to 81¢ a share. The company says the charge, which will cover inventory write-downs, the cost of a new information system, and consolidation of European operations, could force it into credit default. One bright spot: Dell's second-quarter sales should come in at $710 million or so, vs. $457 million a year ago.

DeFEO'S DEFECTION PROMPTS A P&G SUIT

▸ He may be no José Ignacio López, but when operations executive Neil P. DeFeo quit Procter & Gamble on July 8 to join Clorox, P&G promptly filed a lawsuit. The consumer-products giant is concerned that DeFeo may know too much. P&G claims that DeFeo, who had been the company's top global planner for its detergent business, collected key strategic information on household cleaners, bleach, and laundry products before leaving. DeFeo could not be reached for comment. But in a statement, he denied the allegations, saying he's "disappointed and shocked" and plans to sue P&G for defamation. Meanwhile, Clorox has filed suit in California to void the provision in DeFeo's P&G stock-option agreement that prevents him from working for a rival company for three years.

'JUST DO IT' . . . IN SPACE?

Twinkle, twinkle little . . . billboard? The prospect of advertisements visible to the entire Western hemisphere raised eyebrows this spring when Space Marketing Inc., based in Roswell, Ga., announced plans to put mylarlike signs up to three-quarters of a square mile big into low-earth orbit by 1996. Terrific marketing reach, for sure, even if the advertising does burn out after some 10 to 14 days of sky time.

But now, a bipartisan Capitol Hill group led by Senator James M. Jeffords (R-Vt.) has introduced legislation that would bar the licensing of billboard-bearing rocket launches as an affront to the global environment. The lawmakers also are pushing for a U. N. resolution and an international treaty that would have the same effect. Representative Edward J. Markey (D-Mass.), one of the initiative's sponsors, says he wants to ensure that pristine morning and evening skies aren't turned into "the moral equivalent of the side of a bus." For now Space Marketing says it will forge ahead, trying to boldly plug where no one has plugged before.

A NEW HEAD FOR THE NEW YORK FED

▸ The Federal Reserve Bank of New York is set to tap Executive Vice-President William J. McDonough to succeed retiring President E. Gerald Corrigan. McDonough, 59, a former vice-chairman of First Chicago, handles the bank's domestic and foreign financial-market operations. Unlike other regional Fed presidents, the head of the New York bank is a permanent member of the Fed's policymaking Open Market Committee. McDonough is seen as a centrist but hasn't made his views publicly known. The Fed Board of Governors in Washington is expected to formally approve the choice in mid-July.

RESHUFFLING AT KALEIDA LABS?

▸ Insiders say another Silicon Valley chief executive is about to step down just weeks after John Sculley quit as CEO of Apple Computer. Nat Goldhaber, president and CEO of Kaleida Labs, the multimedia joint venture between Apple and IBM, may soon be vacating the corner office. Goldhaber couldn't be reached, and Kaleida declined to comment. But Silicon Valley sources say Goldhaber, the co-founder of networking company Tops and a former meditation instructor, has come under criticism from Kaleida's parent companies for not persuading companies to adopt Kaleida's technology.

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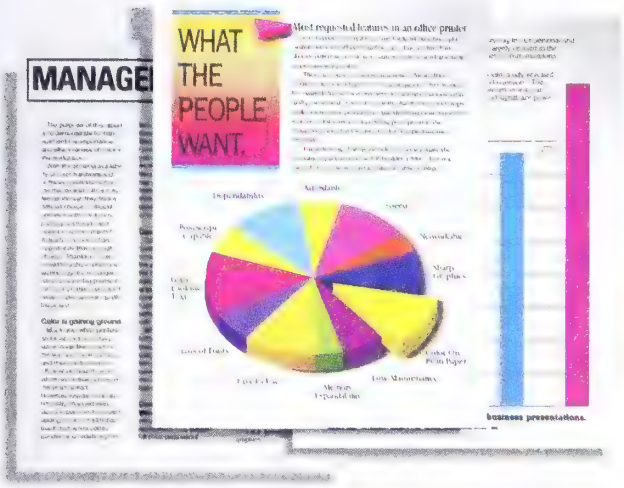

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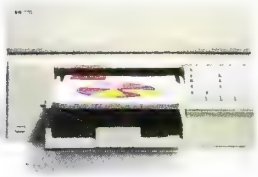

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EDITED BY STEPHEN H. WILDSTROM

CLINTON'S STEALTH SPENDING BILLS ARE SLIPPING THROUGH CONGRESS

With kudos from a successful foreign trip ringing in his ears, Bill Clinton is also enjoying some unheralded success on the domestic front. While fighting to ive his tax bill in a House-Senate conference, the President recording some victories as the rest of his budget wends its ay through Congress' Byzantine appropriations process.

This time, Clinton's approach to spending has been the opsite of his high-profile, futile effort to save his stimulus ll last spring. Talks to shift spending to "investments" in edation, training, health, and infrastructure have been kept iet, with much more success. With work on 13 spending bills early finished in the House and getting under way in the enate, the notoriously independent appropriators are giv- g Clinton a better batting average than any President has joyed in two decades. "He has done very well," says House mmittee member Richard J. Durbin (D-Ill.). "You have to ntrast it to what we've been through for the past 12 years."

HARING THE GOODIES. In all, Congress seems on its way to ving Clinton $16.7 billion worth of the "investment" spending had sought. "We're getting about half of what we wanted," ys a satisfied Robert E. Rubin, director of Clinton's Nation- Economic Council. Lawmakers have been most generous in nding Clinton's requests for new money for the sick and the or. According to the Center for Budget & Policy Prior- ies, the House approved 84% of money that the White ouse requested for 29 programs benefiting low-income peo- e. He got $720 million of the $1.3 billion requested for AIDS d other health research. Other initiatives have fared less ell. The House has approved only 42% of Clinton's request- l increase for the Commerce Dept. and $190 million of the $1 llion sought to support education reform. The Transportation ept. is likely to get about half the increase Clinton asked for.

Clinton's $500 billion deficit-reduction goal is the main bar to ore spending. Congress has trimmed projects ranging from tional service to "empowerment" zones, depressed areas ven special tax breaks to lure business.

One reason for White House success is that control of nding is tightly held by the members of the appropriations committees. Democrats, who beat up on Clinton over taxes, want to make good on the spending bills. And Republican appropriators often go along in exchange for their share of the goodies. At this point, the fate of Clinton's spending program rests mainly with Senate Appropriations Chairman Robert C. Byrd (D-W.Va.). And this time, Byrd, whose excessive partisan zeal inspired the withering GOP attack on the stimulus program, is likely to deliver for Clinton.

By Richard S. Dunham

FOR GREENSPAN, 1996 IS JUST AROUND THE CORNER

Even hard-core political junkies aren't focusing on the 1996 Presidential race yet. But it's not too early for Federal Reserve Chairman Alan Greenspan to start thinking about an event that will coincide with the next New Hampshire primary. Sources say the 67-year-old Greenspan has hinted to the White House that he hopes to be reappointed when his term ends in March, 1996.

It might seem that the very Republican Fed chairman doesn't have a chance. But Greenspan has aggressively—and effectively—courted the Clintonites. "He proactively maintains friendly relations with people all over this place," says one senior Administration figure. He breakfasts regularly with Treasury Secretary Lloyd M. Bentsen and chats often by phone with economic adviser Laura D'Andrea Tyson, among others. White House officials say Clinton likes Greenspan and is happy with his handling of monetary policy so far—not surprising given the sharp drop in long-term interest rates.

Still, Greenspan is no shoo-in for a third four-year term. His best-case scenario: Three years of growth cause price pressures to build. Clinton might then feel he must name a certified inflation-fighter. Ironically, the more successful the Fed is at beating inflation, the worse Greenspan's chances may be.

By Owen Ullmann

APITAL WRAPUP

APPOINTMENTS

How did David R. Hinson, a Republican who backed George Bush, come to be Bill Clinton's choice to head he Federal Aviation Administration? He made friends in high places while unning now-defunct Midway Airlines nc. Hinson got to know Transportation Secretary Federico F. Peña during the hen-Denver mayor's campaign to build new airport. He got close to Illinois ol William Daley, brother of Chicago Mayor Richard M. Daley, an early Clin- on supporter. Hinson, 60, is likely to vin confirmation. But it's dubious vhether the former Navy pilot can get he FAA's troubled air-traffic control modernization program on track. Outsiders say he bungled Midway's big attempt to start a hub in Philadelphia, among other decisions.

ISSUES

While the Clinton Administration puts the finishing touches on its health-care plan, interest in the issue may be ebbing. A new Louis Harris & Associates Inc. poll found that 29% of the public listed health care as one of the "two most important issues for government to address." But, while still outranking all other issues, that total is a sharp drop from 38% in early May. The federal deficit was second at 24%, and the economy third at 22%.

PILGRIMAGES

Motorola Inc. executives weren't prominent among the high-tech backers of Bill Clinton last fall. Still, Clintonites have been trekking to Schaumburg, Ill., to learn the secrets of the company's global success. Energy Secretary Hazel R. O'Leary took 60 staffers to Motorola headquarters for an intensive three-day course in customer satisfaction. And Commerce Secretary Ronald H. Brown spent July 14 at a Motorola factory being briefed on employee empowerment and high-performance work teams. Meanwhile, Motorola Chairman George M. C. Fisher has met with Clinton several times.

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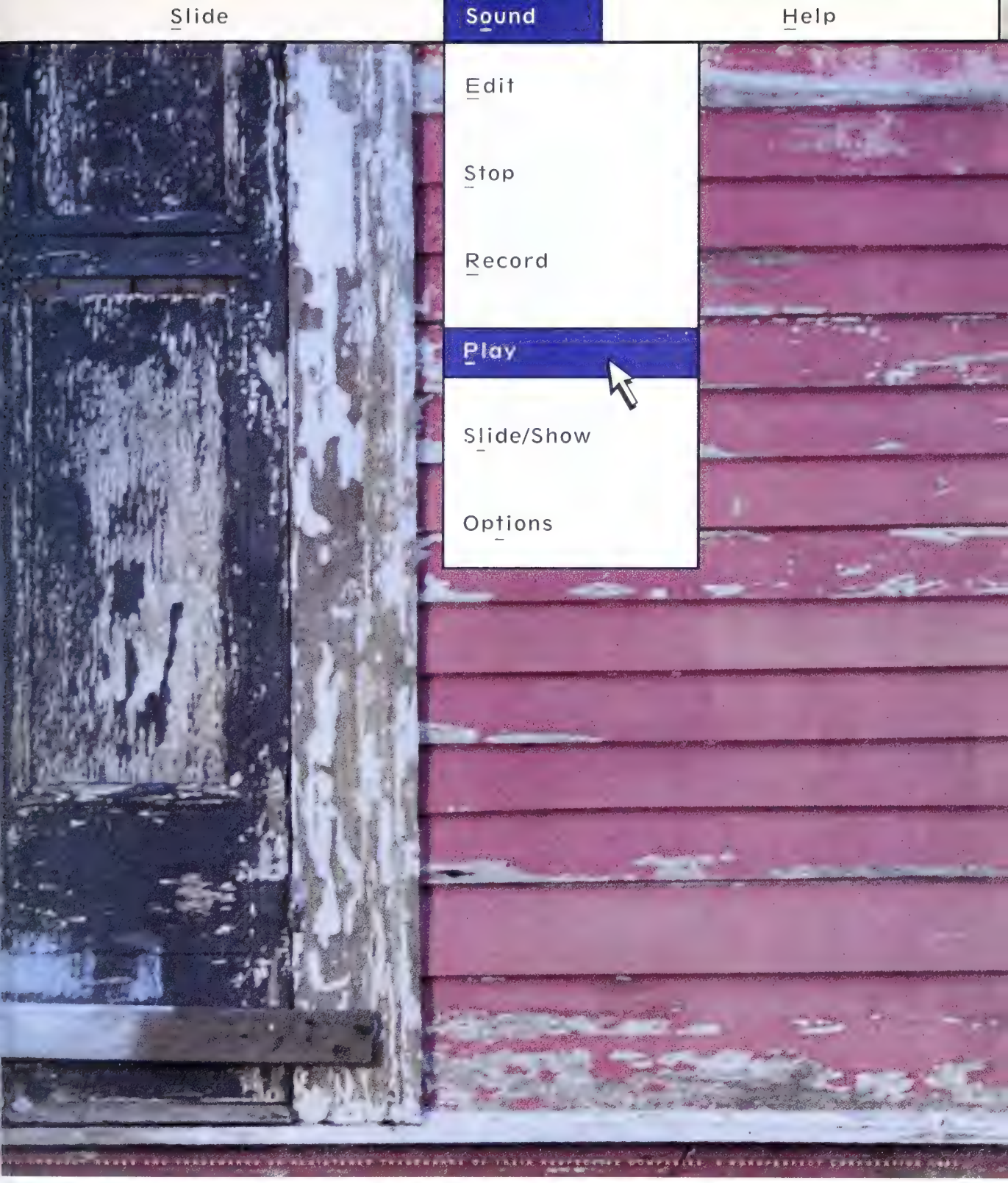

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THE U.S. WARMS TO VIETNAM

- Over the last month, IBM, GE, Caterpillar, and BankAmerica have opened offices in Vietnam
- On July 2, President Clinton approved a renewal of lending to Vietnam by the International Monetary Fund
- In mid-July, a 20-person delegation led by Winston Lord, an Assistant Secretary of State, was scheduled to visit Vietnam to help pave the way for a resumption of diplomatic relations
- In September, most experts expect Clinton to allow the embargo on U.S. trade with Vietnam to expire

SELLING HONDA SCOOTERS IN HO CHI MINH CITY: VIETNAM IS EAGER FOR U.S. COMPANIES TO ARRIVE

JEFFREY AARONSON/NETWORK ASPEN

CHAMPING AT THE BIT IN VIETNAM

Clinton is likely to let the embargo end in September—and Corporate America is ready to roll

Something is in undersupply at IBM's new Hanoi office: Big Blue's own gear. J. William Howell, the company's representative, has just one IBM computer: a ThinkPad PC he shares with his wife and deputy representative, Linden. Bringing in more requires jumping through U.S. bureaucratic hoops. Since Washington's embargo of Vietnam prevents the Howells from selling computers, the two spend most of their time visiting local officials, hoping that they will become customers some day. Quips Linden Howell: "We feel like we're sitting at the back of the runway with our engines on and the passengers yelling at us to take off."

That runway has quickly gotten crowded. For the first time since the fall of Saigon, Corporate America is on the ground in Vietnam. Besides IBM, in recent weeks General Electric, BankAmerica, and Caterpillar have opened offices in Hanoi. Philip Morris Cos., Citibank, and a slew of others are hoping to set up shop soon. As the U.S. presence increases, so does the pressure to break the logjam (table). This month, the U.S. dropped its opposition to international loans to Vietnam. Washington is also sending a high-level diplomatic team to Hanoi in mid-July to pave the way for normalization of relations. All this is building to what U.S. corporations hope will be the grand finale in September, when President Clinton is likely to let the embargo expire.

Backers of normalization got a big lift on July 2. That's when Clinton gave the green light to the International Monetary Fund and the World Bank to renew lending to Vietnam as soon as it makes good on $140 million in old debts. Now, supporters are awaiting Clinton's next move. An executive of one big U.S. multinational eager to get into the market argues it would be "absolutely stupid" for Clinton not to end the embargo, since the U.S. provides 18% of IMF and World Bank funds.

For Vietnam, the new IMF support is vital. By yearend, as much as $1 billion from international agencies could start flowing into Vietnam's treasury—allowing critical highway and seaport projects to begin. That in turn will enable Vietnam to start lining up billions in manufacturing investment from European, Japanese, and other Asian companies. Such funds have been impeded by the country's dilapidated infrastructure and a lack of commercial bank credit.

MISSED OPPORTUNITIES. U.S. companies fear Clinton will get cold feet. Many expected the U.S. to allow multilateral aid in April. That opportunity was scuttled after a Russian document surfaced that seemed to prove that Hanoi held U.S. prisoners of war long after the Vietnam War's end. However, U.S. investigators say Vietnam is cooperating fully in efforts to resolve the cases of more than 2,000 GIs listed as missing in action. On July 15, Winston Lord, U.S. Assistant Secretary of State for Asian affairs, was scheduled to arrive with a 20-person diplomatic mission to help pave the way for diplomatic relations.

Embargo supporters are gearing up well. On the same day as Lord's arriv- in Vietnam, Ross Perot was scheduled hold a press conference with MIA fam- members, discussing purported evi- nce that GIs were left behind after the ar. A leading critic of Hanoi, Senator ob C. Smith (R-N. H.), arrived there on ly 7 to investigate locations of old ive sighting" reports of MIAs. Such essures are bound to increase.

But sources say Clinton is being won er by arguments from U. S. compa- es. In oil, for example, Vietnam had ng reserved leases on some of its most omising offshore oil fields for Ameri- n companies such as Mobil Corp. and evron Corp. But this year, the choic- t sites went to consortiums from Aus- alia, France, and Japan. "We had to low the other countries in because we uld see no prospect for the embargo to lifted," says Nguyen Xuan Phong, etnam's director for U. S. affairs.

PRESEASON." Opportunities in huge blic-works projects are also starting to p away. Among the big projects up for orld Bank funding is a $2 billion, 1,700- ile highway from Vietnam's border ith China south to the Mekong Delta. aterpillar Inc., working through its w office in Hanoi, would like to supply uipment for the project. But it could se out to Japanese and South Korean ppliers if it has to wait too long. "This its companies like us in a difficult situ- ion," says Donald E. McDonald, Cater- llar's managing director for Asia.

For Clinton, Vietnam could bolster his wly launched Asia economic strategy age 51). Once the embargo ends, Viet- m will need U. S. banks, aircraft, and wer plants. Other companies that will well include consumer-product giants olgate Palmolive Co. and Procter & amble Co., which already have brand mes that are well known in Vietnam. Other countries have the jump on the S.," says Eugene Matthews, a Hanoi- sed consultant to U. S. companies. But it's still the preseason."

Another factor in America's favor is at Vietnam still attaches a high strate- c importance to a big U. S. role in the onomy. Not only does Vietnam see merica's market, technology, and capi- l as critical to its development but it w even sees Uncle Sam as a geopoliti- l counterbalance to Japan and the owing military might of neighboring ina. "Where politics is a factor in varding a contract, U. S. companies ill be favored," Phong maintains. Even , he says, "Vietnam can't wait too long r U. S. companies." Vietnam soon will ave the fuel it needs for economic take- ff. The question is whether Clinton has e political will to let Corporate Ameri- ride along.

By Pete Engardio in Hanoi

CHINA

A CRACKDOWN—OF SORTS

China is battling corruption, but so far at pretty low levels

Zeng Lihua is an unassuming bureaucrat, a slight woman who prefers simple clothes. Yet as manager of the Shenzhen Construction Consultation Co., an engineering consulting firm, this low-profile executive stands at the center of a giant bribery scandal. According to the official Chinese press, Zeng confessed to using a safe-deposit box in Hong Kong to stash away more than $1.2 million in cash bribes from companies eager to get pieces of real estate deals she controlled.

Zeng is a symbol of the widespread corruption that now has Beijing alarmed. Such *guandao*, or profiteering by officials, helped trigger the prodemocracy protests that ended in the bloody crackdown in Tiananmen Square in 1989. To head off another Tiananmen, the leadership in Beijing is making the suppression of corruption a key part of its new campaign to regain control of China's overheated economy. The question is how far Beijing really wants to go. If officials ferret out large numbers of influence peddlers, the investigation could lead to the upper reaches of the party—and provoke a political crisis.

Beijing is certainly talking tough for now. In mid-July, Luo Gan, secretary general of the State Council, warned that over the next six months, the government would go after officials who "take advantage of their power and authority to seek private benefits for themselves." At the same time, Vice-Premier Zhu Rongji was dispatching investigators to the provinces, in part to warn bankers against corrupt lending.

The corruption takes many forms, from the sale of stolen natural resources—oil, gas, timber—that are needed to fuel China's future economic growth to outright shakedowns of peasants for fines by thuggish officials. Meanwhile, the scams and secret deals have spilled beyond China's borders. Hong Kong shipping agents are increasingly miffed about regular detentions of their vessels—particularly when they are laden with a cargo of automobiles—and the subsequent cash demands made by mainland security forces to release the ships.

The banks play a key role in this wave of *guandao*. "Corruption now stems from those who have access to bank loans," says a Beijing academic. Zhu, who heads China's central bank, aims to stamp out many bankers' habit of ignoring credit standards and awarding loans to speculators with *guanxi*, or connections. In one case, eight bankers received stiff sentences, including the death penalty, for accepting bribes in return for loans.

BIG FISH. Even though several corruption cases are getting plenty of press, the authorities hint there are much bigger fish out there. In a report in the pro-Beijing Hong Kong newspaper *Ta Kung Pao*, an unnamed high-ranking Chinese official insists that "we must investigate some big cases" to win public confidence. So far, no well-known cadre has been formally charged with corruption in the latest crackdown.

General condemnations of high living, however, abound. The Beijing-controlled press routinely features scolding reports on costly dinner parties given by party officials. But Beijing will have to do a lot more than criticize dining habits before it succeeds in rooting out corruption—and solving its most pressing political problem in years.

By Joyce Barnathan in Hong Kong, with Matt Forney in Beijing

HONG KONG SHIPPERS SAY CARGOES OF CARS ARE REGULARLY HELD UP FOR CASH BRIBES

GREG GIRARD/CONTACT

Commentary/by Rose Brady

FOUR YEARS THAT SHOOK MY WORLD

The movers have come, and I'm packing up souvenirs from four astonishing years in Moscow. Here's the tape of the horrible night in January, 1991, when tanks attacked peaceful demonstrators in Lithuania. (The Lithuanians sound defiant; I sound terrified.) Here, too, is the flower presented to me by a young defender of the Russian White House as we kept vigil together during the abortive putsch of August, 1991. And I can't leave behind the can of sardines an old woman gave me as I trudged through the snow in a grimy Russian industrial town. "You look hungry and miserable," she said, insisting I take part of her monthly ration.

Miserable? Well, perhaps I was at times. Long, dark winters and impossible phones can get to you after a while. But mostly I was awed by the ability of Russians, Balts, Ukrainians, and other citizens of what was then the Soviet Union to withstand, beginning in 1989, tidal waves of political change.

Now, as I prepare to leave Moscow, I see the Russians adapting to the difficult economic reforms launched in 1992. I'm convinced that they are building what could become a prosperous capitalist economy.

MOSCOW BUREAU CHIEF BRADY LOOKS PAST THE TUMULT AND COMES AWAY BELIEVING RUSSIA'S NEW FREE ECONOMY WILL FLOURISH

DIRTY WORD. They have already come a long way. It's easy to forget, with the politicians constantly bickering and the macroeconomic statistics telling of 15% monthly inflation, a 7 trillion-ruble budget deficit, and a lifeless currency. But when I arrived in 1989, Moscow was a dull city of painfully empty stores that all seemed to look alike. Basic goods, such as cheese, sour cream, and paper, were nearly always in "deficit," as the Russians put it.

Biznezman was a dirty word then. Only the toughest and wiliest dared set up restaurants, stores, trading companies, or banks. They were hounded by bureaucrats, watched by the KGB, and generally condemned for *spekulatzia*—charging more than they paid, making a profit.

Now, every Russian is a potential *biznezman*. Economic necessity and new economic freedoms have spurred thousands of Russians to give up their old prejudices against profit. Kids clamor to clean my car at almost every intersection. My fax machine delivers up notices of new services daily: dry cleaning, fast-food deliveries, and discount travel tickets. Fed up with earning the equivalent of $20 a month, a dentist friend closed his practice a year ago and set up a company that buys, refurbishes, and resells apartments. He just bought his first Mercedes.

Consumption now is booming—a sharp break with the past. On nearly every block in Moscow, rows of kiosks emblazoned with such slogans as "Everything for You" sell Turkish-made blouses, Kentucky bourbon, and "Green Love" condoms made in South Korea. Revamped shops in downtown Moscow sell Danish ham, Dutch cheese, and plentiful Russian goods. Billboards proclaim the availability of once exotic Western products and services. Meanwhile, new three-story homes are rising on the outskirts of the city.

The chance to buy goods after years of shortages provides people, whether former Communist Party *apparatchiks* or recent university graduates, with a powerful incentive to earn money. Owning things gives them a stake in the new system. Day by day, a greater sense of individualism is replacing the grayness, the sameness, the contrived equality, and the lack of responsibility that underlay Soviet socialism.

Of course, a tumultuous transition from socialism to capitalism was bound to churn up new problems. Fearing their days are numbered, Communist-era bureaucrats are seizing their last chance to earn bribes for giving out licenses. To avoid taxes, *biznezmen* are stashing large parts of their income abroad. Gangs of racketeers demand protection money—and sometimes kill those who resist. The legacy of low wages under socialism means—now that the cost of basics is so much higher—that as much as 40% of the population lives in poverty. Unemployment and bankruptcies both are sure to mount as the painful process of industrial restructuring accelerates.

What's striking is that in the face of these problems, ordinary Russians aren't rioting in the streets. Instead, they're plotting how to make a ruble, or, better yet, a buck. There's enough of a cultural sea change to carry the

precarious new economy along while President Boris Yeltsin struggles to remake the country's institutions. He still must rewrite the constitution, slash government spending, and stabilize the ruble, or the grass-roots efforts could wilt. But as long as Yeltsin continues his push for stability on the national level, he will help entrepreneurs and managers become a powerful force for change.

ACID TEST. They still have to win over some Russians who figure that *biznezmen* make money only by buying and selling and can't be counted on to invest in Russia's productive future. This is one acid test for the country: whether the entrepreneurs active in consumer goods, finance, and lighter industries will channel their profits into heavy industry, still the backbone of the nation's economy.

I think they will. New investment opportunities are opening up. Consider Andrei Chuguevsky, 33, a hard-driving entrepreneur who made his first millions trading computers nearly four years ago. When we met earlier this year, his company, Arter Group, had just won the license to develop the rich Udokan copper mine in Russia's Far East. And when he opened an office in Irkutsk, in Siberia, Chuguevsky presented a 1 million-ruble icon to the local church and offered to pay for two scholarships for study in the West—all to woo local officials before an expected tender for Russia's largest gold mine. "Just to sell oil isn't interesting," he says.

Other serious investors are swooping in to take advantage of the massive privatization program. A little-known Georgian investor, Kakha Bendukidze, snapped up 18% of the sprawling machine toolmaker Uralmash—built by Stalin in the 1930s—when it was privatized recently. Alfa Capital, a fund set up to invest citizens' privatization vouchers, is buying 8% to 10% stakes in cement producers, construction companies, and such Russian mainstays as the Bolshevik Confectionary Co.

Add up all these investments, and together they could ignite the long-delayed restructuring of Russia's backward industry. By yearend, the government expects to have privatized 5,000 enterprises—about half of the industrial sector. And by the end of 1994, the state will have sold its majority stake in all but a select group of strategic industries. To survive, these factories will be forced to retool and gear up for competition.

Don't expect many overnight transformations. Russian managers and workers suddenly turned owners are often afraid of abrupt change. At the first shareholders' meeting of the newly privatized Vladimir Tractor Factory recently, shareholders voted against the appointment of a new general director, a former deputy manager with a Harvard business school degree. Josef Bakaleynek, 41, urged his candidacy on the shareholders as they gathered in the rain in the local football stadium: "The survival of the enterprise is at stake. We have to prepare for competition." Despite the appeal, they stuck with General Director Anatoly Grishin, an 18-year veteran. But Bakaleynek, who bought 8% of the tractor plant's shares and won a seat on the board, thinks the shareholders will want him in a year or so, when the plant begins to face real competition.

Bakaleynek was one of the first managers I met back in 1989. Then, he and other industrialists rarely uttered the word *privatizatzia.* Now, it's clear that private investment is the key to Russia's future. With the government broke, it's the only way the economy can grow. And the only way to woo private investment is to achieve political stability. There, Yeltsin seems to be on the right track. A new constitution will lead to parliamentary elections, which will sweep away Communist hangers-on and probably produce a more reformist body. That will allow Yeltsin to push through the land reforms, securities regulations, and other changes parliament has resisted. Western aid can help, but it is not enough to make a critical difference.

Much more must be done. The government needs to work on enforcing the laws—chasing down tax evaders and racketeers, for example—and cleaning out its own corrupt offices. If Yeltsin fails to do that, social disillusion will deepen.

Many difficult days, even years, lie ahead. As I pack up my boxes, I try to imagine what the Russia I've known might look like four years from now. If things go wrong, the widening gap between rich and poor could indeed send people into the streets. But if Yeltsin can build on the changes and attract investment, the pain will begin to ease and the economy will slowly begin to turn around.

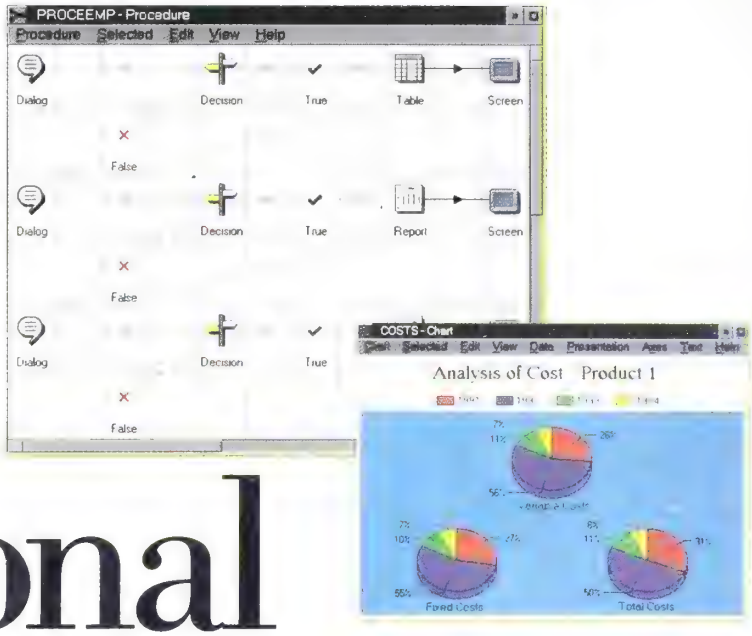
At a recent lunch with the BUSINESS WEEK bureau's Russian employees, I got an earful about the promise of the new Russia. A year ago, they were howling about high prices. Now, they're urging me to make a long-term investment. "Buy a piece of land. Buy a *dacha,*" counsels Tanya, the secretary. "Buy some privatization vouchers and invest in some good factory."

Maybe I will. After all, a dollar goes a long way here. And after seeing Russia in such dire straits, I want to watch its renaissance unfold over the remainder of the century.

Brady is returning to New York to become the 1993 Edward R. Murrow fellow at the Council on Foreign Relations.

ROADSIDE BILLBOARD: CONSUMPTION NOW IS BOOMING, AND ADS FOR MANY KINDS OF IMPORTED GOODS ARE POPPING UP ALL OVER

NIKOLAI IGNATIEV/NETWORK, MATRIX



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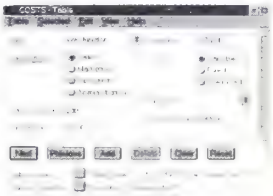

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EDITED BY STANLEY REED

CLINTON'S TOUR COULD MEAN A TILT TOWARD ASIA

Ever since the end of the cold war, the U. S. has been groping for a new role in East Asia, the world's most dynamic economic region. As the perceived Soviet threat to ne area seemed to evaporate quickly, the U. S. withdrawal rom the Philippines last year fueled fears that a full-fledged trategic retreat was getting under way. All the talk of creatng a North American trade fortress suggested that the mericans were withdrawing economically as well.

On his six-day journey, President Clinton ried to change all that. He proclaimed a omprehensive U. S. approach to Asia that ould have more lasting significance than his quishy trade deal with Japan (page 24). In peeches, notably at Tokyo's Waseda Univerity, Clinton showed a keen appreciation of sia's interdependency with the U. S. and owed not to let trade disputes with Japan oison overall Pacific Rim relations. "I beeve the Pacific region can and will be a ast source of jobs, of income, of partnerhips, of ideas, of growth for our own people n the United States," the President said.

Could it be that Clinton will put Asia on an qual footing with Europe? Ronald Reagan sed similar rhetoric a decade ago but never llowed through. White House officials say sia is now a high priority and that Clinton elieves it offers the best prospects for exorts that create quality U. S. jobs. "If you ok at just China, it could be the biggest conomy in the world in 20 years in terms of purchasing ower," says Robert E. Rubin, head of the National Econom: Council.

RUNNING IN STEP: CLINTON AND SOUTH KOREAN PRESIDENT KIM

APPY TALK. Asian officials from South Korean President im Young Sam on down were pleased by Clinton's pledges to ick to current Asian treaties and maintain a U. S. military resence in South Korea and Japan, and they liked his tough lk about North Korea's nuclear program. If Clinton had indicated that America might reduce its role in the region, many Asians would have worried that China, Japan, and other local powers would be tempted to fill the ensuing vacuum, spawning conflicts and endangering growth. With China's massive buildup a major worry, Asians are happy to have the U. S. shift its role from nuclear protector to regional balancer. "Clinton has shown that the U. S. should stand firm," says Richard K. Yang, chairman of the Chinese Council of Advanced Policy Studies in Taipei, Taiwan.

There are other signs of shifting U. S. policy. Clinton's decision in June to renew China's most-favored-nation trading status and his movement toward lifting sanctions against Vietnam (page 46) show a preference for expanding trade over waging ideological warfare. Washington also is signaling a change in approach to the Association of South East Asian Nations—Indonesia, Thailand, Malaysia, the Philippines, Brunei, and Singapore. The U. S. now supports their efforts to create a regional security forum. ASEAN's six Foreign Ministers will meet in Singapore in late July, with regional security first on the agenda.

The next test of the U. S.'s interest in Asia will come when it hosts a meeting of 15 Asian heads of state in Seattle in November. Clinton wants to use the Organization for Asian-Pacific Cooperation (APEC) as the forum. If so, APEC could become the keystone of an expanded bridge across the Pacific.

Ultimately, the question is whether Clinton's flurry of Asian initiatives was timed to make his trip a public-relations success or reflects a long-term commitment. Presidents have long made grand gestures toward Asia, only to relapse into Atlantic-oriented policies when they got home. But economic imperatives now may keep Clinton focused on the Pacific.

By Owen Ullmann in Tokyo and Pete Engardio in Hong Kong

GLOBAL WRAPUP

MEXICAN POLITICAL REFORM

The ruling Institutional Revolutionary Party (PRI) has gotten the drop on opposition politicians by proposing broader-than-anticipated political reforms for the 1994 presidential elections. The new formula would give the opposition more senate seats, guarantee them access to the media, put strict rules on campaign financing, and toughen up election supervision. The proposals are in part aimed at convincing the U. S. and Canada, Mexico's potential partners in the North American Free Trade Agreement, that the country is becoming more democratic. President Carlos Salinas de Gortari, who won just 51% of the vote in 1988, may also be trying to head off a possible alliance between his main opponents, the middle-of-the-road National Action Party (PAN) and the left-leaning Democratic Revolutionary Party (PRD).

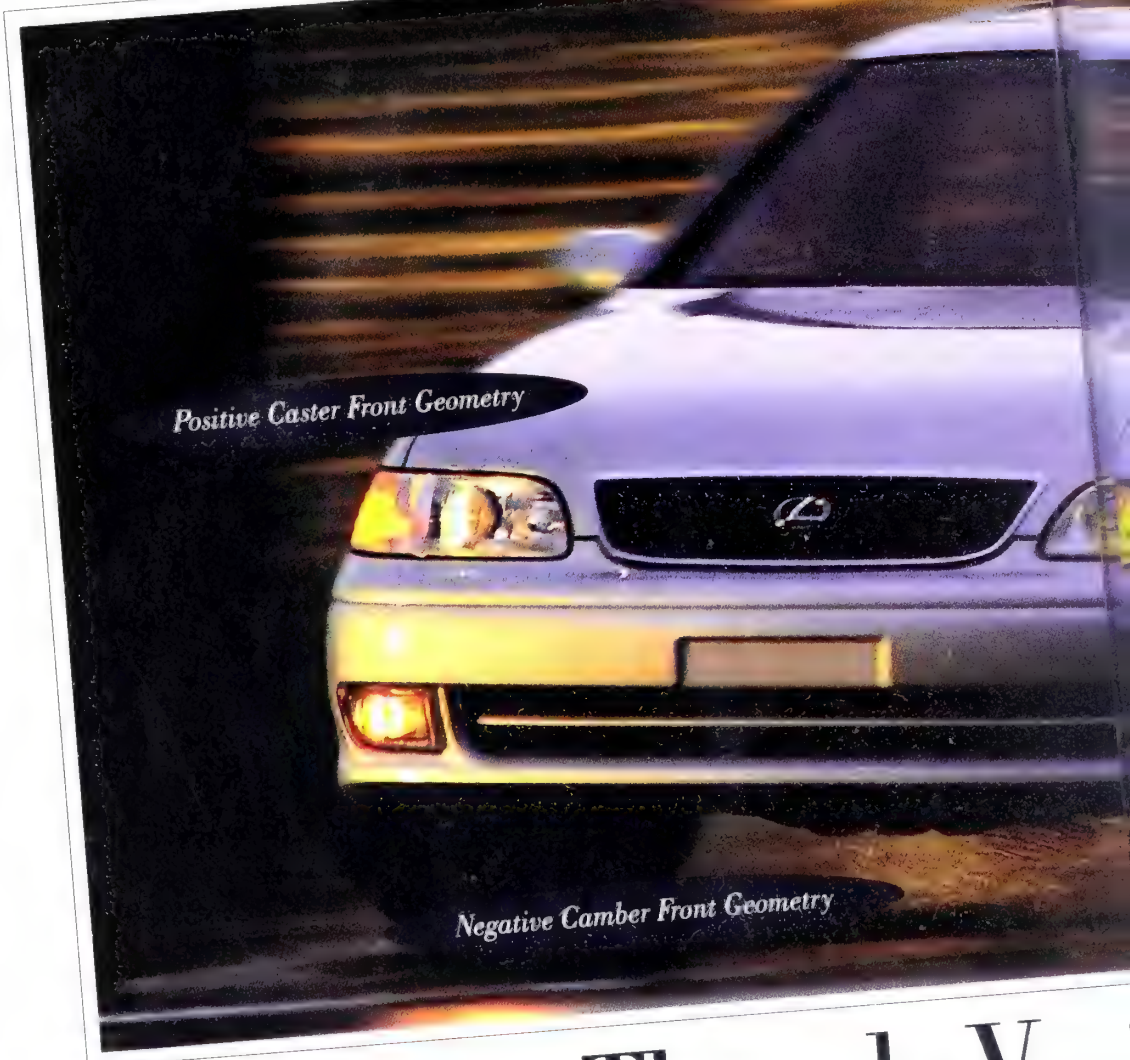
ITALIAN DEBT SWAPS

The Italian government is going all-out to make its huge privatization program a success. To make offerings more attractive, Italian citizens will be able to pay for shares by turning in widely held Italian Treasury bills—the traditional form of family savings in Italy. And under new proposals, prospective investors will also be able to pay in installments. The first big flotations, investment bank IMI and insurer INA, will hit the market in November.

NEW BLOCS FOR OLD?

With the Commonwealth of Independent States virtually a dead letter, the former Soviet Union may be realigning in ethnic blocs. The predominantly Slavic countries of Russia, Ukraine, and Belarus announced they will form an economic union with the aim of adopting common tariffs, trade rules, and perhaps even a single customs agency. Also, an Islamic-oriented grouping seems to be forming among Azerbaijan and the five Central Asian republics. The three Baltic republics constitute a third bloc.

AP WIDE WORLD



And You Thought You
Geometry Aft

Chances are, you haven't
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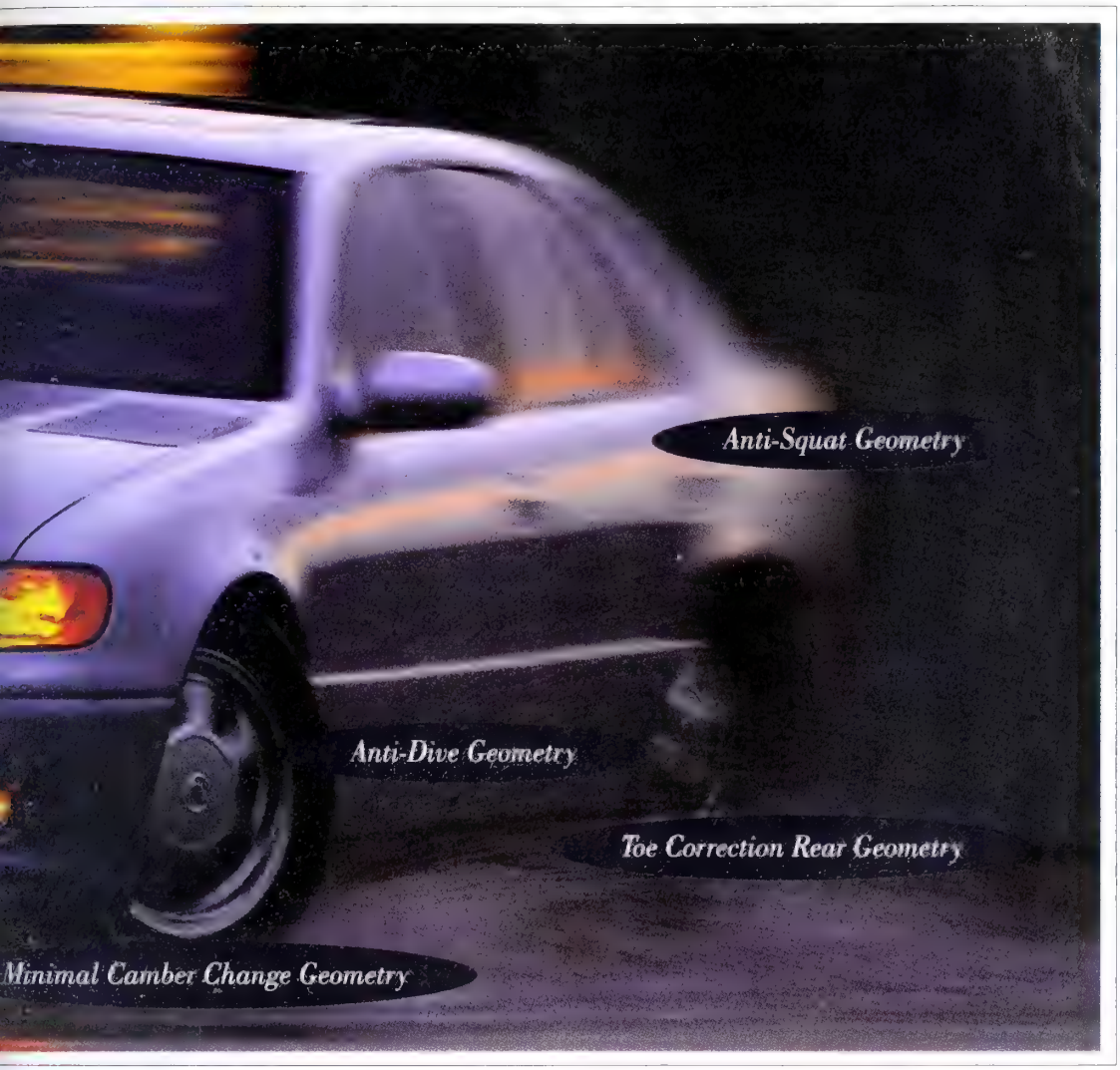

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"RETAILING WILL NEVER BE THE SAME"

WITH THE HOME SHOPPING NETWORK-QVC MERGER, THE STAMPEDE IS ON

Cathy Burke, a 55-year-old secretary in Kearny, N. J., is one satisfied customer. A few days ago, the mailman delivered a $50 pink pants suit and a $40 Kenneth Jay Lane *faux* gold-and-seed-pearl necklace that she purchased from home shopping channel QVC. She loves them. Burke has bought about 200 items from the network over the past five years. She shops for herself, her children, and her grandchildren, and keeps a "wish list" of QVC items so her family knows just what to buy her on holidays.

Burke spends an average of $50 each time she orders from QVC Network Inc.—most of it on clothes and gold jewelry. "I don't think I'd buy gold from anywhere else," she says. "I would never dream of going to the jewelry counter in a department store."

Gabe Doppelt, 33, editor-in-chief of *Mademoiselle* magazine since the March issue, says she has been "obsessed with television shopping for years." An avowed insomniac, she watches television all night. Among her purchases: everything from Ninja Turtle toothbrushes to throw pillows to wrap dresses. Does the editor of a hot fashion magazine actually wear dresses she bought on TV? "Hell, yeah," says Doppelt. "I wear them all the time."

No wonder many industry executives are saying that the business of retailing will never be the same. If you thought that home shopping was just about selling tacky figurines to the more woebegone denizens of trailer parks, guess again. It's already a $2 billion-plus industry and growing fast—about 20% a year. As cable systems upgrade to offer hundreds of channels, and, eventually, digital, interactive, and other media-maniacal technologies, home shopping promises to proliferate in ever more elaborate forms. The ultimate vision: a sort of video mall, where shoppers will browse through channels as through individual stores, ask for information and advice, order, and pay—all without leaving the comforts of home.

To the people who observed and invested in this industry, there was no surer sign of its promise than the arrival of Barry Diller. The Hollywood *wunderkind* who turned Fox Broadcasting Co. into a powerful fourth network bought a 3% stake in QVC, the second-largest home-shopping channel, last December and took over as chief executive in January (page 58). QVC's stock has shot from around 28 when Diller announced his investment to around 71 today. Its market value has soared from some $1.2 billion to more than $3.4 billion.

And when Diller announced on July 12 that QVC would merge with Home Shopping Network Inc., Wall Street and Seventh Avenue were abuzz over what the new alliance would mean for everyone hoping to make a profit off consumers who shop from home. The merger will create a $2.2 billion home shopping mega-network that will be available to more than 60 million viewers, or two-thirds of all television households. To many observers, it will also form a behemoth with the resources, audience reach, and marketplace clout to finally propel home shopping into its powerful, high-tech future. "If you include catalog and store sales," says Diller, "retailing is close to a $1 trillion business. So we're small in the world of retailing, but we have a lot of room to grow. And that's what we intend to do."

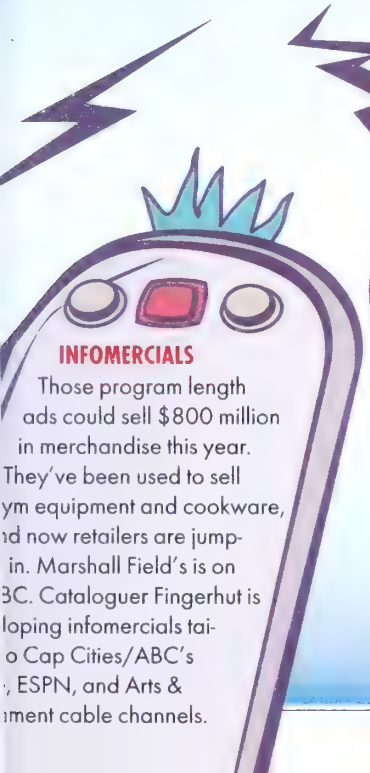
RETAILING'S NEW FRONTIER

Home shopping is going upscale and high tech—and it's growing fast. No wonder the troubled U.S. retail industry wants to climb inside your TV set.

HOME SHOPPING

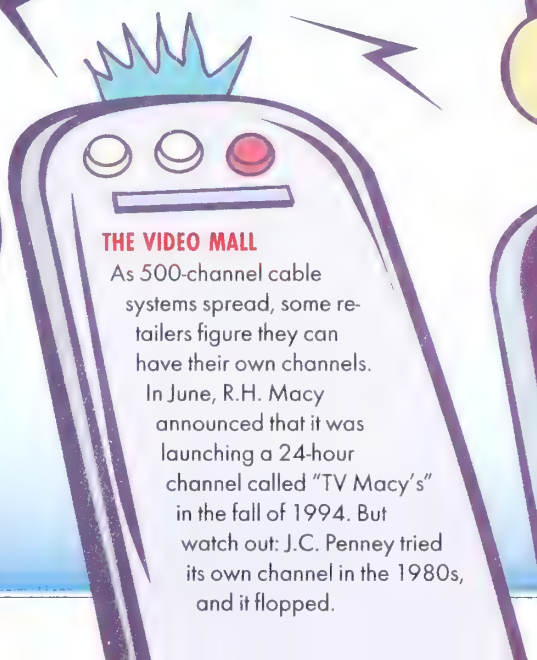
The original. They hawk stuff on the air, you phone in to buy it. This $2 billion business would be 99%-controlled by a merged QVC and HSN. And now it's a lot more than cheapo jewelry. Saks Fifth Avenue has gone on QVC and so have designers such as Arnold Scaasi and Diane von Furstenberg.

PITCHING BASEBALL ON QVC: A $2 BILLION MEGA-NETWORK



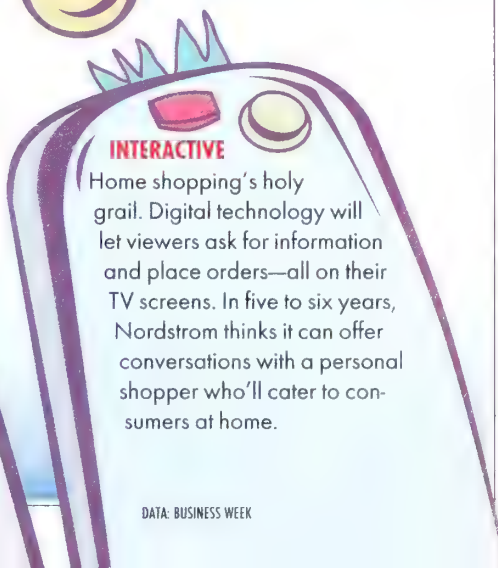
INFOMERCIALS

Those program length ads could sell $800 million in merchandise this year. They've been used to sell ym equipment and cookware, ıd now retailers are jump- in. Marshall Field's is on 3C. Cataloguer Fingerhut is loping infomercials tai- o Cap Cities/ABC's ', ESPN, and Arts & ıment cable channels.



THE VIDEO MALL

As 500-channel cable systems spread, some retailers figure they can have their own channels. In June, R.H. Macy announced that it was launching a 24-hour channel called "TV Macy's" in the fall of 1994. But watch out: J.C. Penney tried its own channel in the 1980s, and it flopped.



INTERACTIVE

Home shopping's holy grail. Digital technology will let viewers ask for information and place orders—all on their TV screens. In five to six years, Nordstrom thinks it can offer conversations with a personal shopper who'll cater to consumers at home.

DATA: BUSINESS WEEK

PHOTOGRAPH BY ARPY FORD; ILLUSTRATION BY RAY VELA FW

Until recently, there seemed to be just one piece missing from the picture—the big-name stores to occupy the video mall. After all, shopping by cable TV has been around for years: HSN was founded during the late 1970s and QVC in 1986. But most major retailers have resolutely shunned it as a downscale medium whose average viewer was a far cry from the urban and suburban sophisticates that merchants hanker after.

Not anymore. Suddenly, a stampede of department-store chains, specialty outlets, catalog retailers, and mass merchants are re-examining home shopping. Some are planning to sell their wares on the existing channels, such as QVC and Home Shopping Network. In fact, home shopping passed a milestone of sorts this spring, when tony Saks Fifth Avenue went on QVC twice with items from its "Real Clothes" private-label collection. Saks racked up more than $1 million in sales, and CEO Philip Miller was thrilled with the experience. Plenty of others will follow Saks' lead, Diller figures: "You'll see specialty stores, lifestyle, health, videos, recorded music."

Other retailers are hoping to launch their own full-time shopping channels, and still others are laying plans for high-tech interactive services. Then there are those spending big on "infomercials" that air on cable and broadcast TV. All in all, says Alan Millstein, a New York retailing consultant, "retailing has been profoundly changed by the dramatic success of QVC and HSN."

What changed so many people's minds about home shopping? Its new image, for one thing. That's partly thanks to Diller. "Our business was growing," says Doug Briggs, QVC's executive vice-president of electronic retailing. "But Diller's arrival really raised the interest."

It also turns out that the home shopper is younger, better educated, more affluent, and more style-conscious than many people thought (table). And home shopping is the right idea at the right time: Shrinking leisure time and the swelling ranks of women in the work force mean fewer people have the time for a nice, long shop. Or the patience: More and more folks just hate the hassles and inconvenience of shopping in malls and department stores. And in the nervous '90s, even upscale shoppers are value-conscious, and value remains part of the aura of home shopping.

Then, too, the beleaguered retail industry has plenty of reasons to look for salvation. The past five years haven't been happy ones for merchants. Bankruptcies, store closings, the recession, and the generation of penny-pinching consumers it spawned sent retailers' sales into a tailspin. Sales growth slowed to 2% in 1990-91, compared with 4% in the mid-'80s. No wonder retailers are desperate for a new growth engine.

And home shopping has them salivating. "Let me tell you the wonderful characteristics of home shopping," says Peter Siris, an analyst at UBS Securities. "It's a low-cost distribution system. You don't need thousands of stores, and you don't need thousands of pieces of inventory in each location."

That also means the home shopping revolution could have some painful side-effects. As Millstein notes: "The three biggest expenses for a retailer are rent, sales help, and advertising." Home shopping could help retailers slash all three. The vacancy rate for U. S. retail space is already a painful 13%, and it's sure to climb if shoppers flock to the video mall. The retailing industry employs 19 million people, a number that has already fallen by 411,000 since 1989. That trend can only accelerate as the TV tube becomes the salesperson.

As for advertising, the powerful, targeted marketing of home shopping could eventually enable retailers to cut their conventional ad budgets sharply. Glossy magazines get much of their advertising from retailers who want to reach a certain kind of reader. And large department-store chains are the advertising mainstay of big-city dailies. "When you sell on TV," says socialite designer Diane von Furstenberg, "you do the selling and the advertising all at once."

CINDYVISION? She knows what she's talking about. Von Furstenberg has already sold more than $1.5 million worth of apparel on QVC and plans to use the channel to launch a new jewelry collection and a line of fragrances and home furnishings called "Surroundings" this fall. Von Furstenberg is a pal of Diller's and takes credit for piquing the Hollywood mogul's interest in QVC last year when he accompanied her to QVC to watch her sell her "Silk Assets" apparel line. Now, she believes, Diller's challenge is to "bring in a new generation" of viewers.

That's clearly the strategy behind the Fashion Channel, a secondary channel QVC launched in 1991 that now has just 9 million viewers. By the end of the summer, QVC will announce a new format for the cable channel designed to reach a young, affluent audience. Diller won't give details yet, but it's a safe bet that the Fashion Channel will break out of its slightly schlocky mold. Supermodel Cindy Crawford is rumored to be interested in hosting her own lifestyle program on the channel. Executives from Donna Karan have shown interest, and a spread on QVC fashions called "Clothes to Watch" in *Mademoiselle*'s August issue could help get the under-30 set to tune in.

Diller also has designs to take home shopping global. At his shareholders' meeting on June 28, Diller announced he was negotiating to broadcast in Japan and Canada. In early June, QVC announced plans to broadcast to Britain, Ireland, and parts of Europe in an alliance with British Sky Broadcasting, which is 50% owned by Rupert Murdoch's News Corp. QVC will be transmitted live from London starting Oct. 1. And in April, QVC announced a deal with Grupo Televisa to broadcast live in Mexico, Spain, Portugal, and Latin America in Spanish and Portuguese.

Back home, Diller is exploiting his Hollywood connections for all they're worth. For example, the producers of *Free Willy*, a new Warner Brothers movie about a boy and his whale, are scheduled to come to QVC on July 15 to sell merchandise tie-ins with their movie: T-shirts, baseball caps, and the movie's soundtrack. Susan Lucci, a.k.a. Erica

WHO'S BUYING THIS STUFF, ANYWAY?
(PSST—IT'S NOT WHO YOU THINK)

	TV SHOPPERS	AVERAGE SHOPPER*
TV SHOPPERS ARE YOUNG...		
25-34	26%	24%
65 plus	11%	16%
...EDUCATED...		
High school graduates	34%	31%
Some college	27%	30%
...REASONABLY AFFLUENT...		
Average household income	$34,900	$38,000
Percent making $75,000-plus	8%	9%
...FASHION-CONSCIOUS...		
Open to new styles, trends	26%	16%
Prefer traditional things	29%	33%
Choose value/comfort over fashion	29%	35%
...AND PLENTY ARE MEN		
Males	48%	47%

*AVERAGES FOR 300,000 SURVEYED SHOPPERS

DATA: DELOITTE & TOUCHE, QVC, HSN

HOW TO SELL ON-SCREEN

Early experiences in home shopping have taught retailers some important lessons:

- Make merchandise seem special, limited, and available through TV only.
- Viewers pay a lot in shipping and handling, so goods should be presented at "bargain" prices.
- Choose apparel in primary colors. Complicated patterns look fuzzy on TV.
- Stock up on large sizes. Many home shoppers are women who wear size 14 and above.
- Describe scenarios in which viewers might use the merchandise: Perfect for cruises, etc.
- Sell merchandise with features that are easy to demonstrate, such as cameras and vacuum cleaners.
- Hire celebrities to glamorize inexpensive items such as hair-care products or makeup.
- Develop a cozy rapport with your viewers, so home shoppers feel intimate with the hosts.

SILK TOUCH: QVC IS UPSCALE ENOUGH FOR SAKS

DATA: BUSINESS WEEK

ane, the glamorous villainess from BC's *All My Children*, will come on the now on July 17 to help sell merchandise onnected to the soap opera—such as a mited, autographed edition of "Erica's" mily portrait. And Joan Rivers has old more than $60 million worth of jewry on QVC, and is about to launch a ew line of facial products and expensive ostume jewelry on the network. Says rian L. Roberts of Comcast, which toether with Diller and Liberty Media ill control the combined QVC/Home hopping Network: "The Hollywood peoe around Barry will help turn this into ore than cubic zirconium."

With or without Diller's friends, a paade of retail executives is giving a lot thought to the idea of producing infoercials, launching shopping channels, investing in interactive shopping venres. R. H. Macy & Co. has nounced plans to introduce s own 24-hour shopping annel during the fall of 1994. ichard Thalheimer, CEO and under of Sharper Image orp., is negotiating for air me on QVC in August.

Dayton Hudson recently red a half-hour infomercial romoting a line of pillows nd comforters. "We've been ery encouraged by the initial esults," says Jim Stirratt, ayton's senior vice-president merchandising, although he eclines to discuss results. Hopefully, we're positioning urselves to take advantage the new technology."

Many infomercial producers are delighted at the HSN-QVC merger. Much of the merchandise sold on infomercials also gets sold through home shopping channels. But until now, products pitched on QVC couldn't be sold on rival HSN—and vice versa. "The first thing I thought was that I just doubled my distribution," says Greg Renker, president of Guthy Renker Corp., which produced infomercials for Victoria Principal's line of cosmetics and Vanna White's Perfect Smile tooth whitener, among other clients.

Plenty of tony retail names you might not have associated with TV shopping are exploring the medium. Nordstrom, Bloomingdale's, and Williams-Sonoma—among others—recently aired their goods on NBC *Direct*, a one-hour program that featured merchandise from the anchor stores at Minneapolis' Mall of America. J. C. Penney Co., a home shopping veteran whose early efforts bombed, will join in the test of a new, interactive program called *TVAnswer*, a satellite video service that will allow customers to order merchandise via a remote control device. And Nordstrom Inc. in early 1994 will launch a traditional catalog as a stepping-stone into the science of direct selling, in anticipation of selling merchandise interactively within five to six years.

NIXED MEDIA. Even so, some retailers think television has a ways to go before it becomes an appropriate medium for their message. Says Michael Gould, CEO of Bloomingdales Inc.: "I think you have to be careful. I don't think the environment QVC has today is right for the way Bloomingdale's has to be positioned." Arthur Martinez, CEO of Sears, Roebuck & Co., shares Gould's wait-and-see attitude toward home shopping—even though Sears has been selling its Craftsman tools on QVC for years. "It's not clear what the underlying merchandising strategies are that will be needed to be successful in that environment," says Martinez.

The minds behind QVC/HSN have anticipated such concerns. Ultimately, as channels proliferate and their audiences become more selectively targeted, there should be room for nearly every kind of retailer in the home shopping future. That's why Gerald Hogan, CEO of HSN, isn't worried

HOME SHOPPING'S DYNAMIC DUO

VITAL STATISTICS OF QVC NETWORK AND HOME SHOPPING NETWORK

	QVC NETWORK	HOME SHOPPING NETWORK
AVERAGE REACH	47 MILLION All cable subscribers	60 MILLION Half cable, half broadcast
1992 REVENUE	$1.07 BILLION	$1.10 BILLION
CEO	BARRY DILLER	GERALD HOGAN
KEY SHAREHOLDERS	LIBERTY MEDIA (22%) COMCAST (11%) TIME WARNER (5%) BARRY DILLER (3%)	LIBERTY MEDIA (42%)

DATA: COMPANY REPORTS

HOW FAR CAN BARRY GO? VERY FAR, IT SEEMS

Barry Diller has become the Ross Perot of Hollywood: rich, unpredictable, and a source of boundless curiosity. Like Perot, some thought that Diller would be sidelined when he traded Fox Broadcasting Co. for QVC Network Inc. But then the legendary programmer served notice that his home shopping channel would be a vehicle for innovations in multimedia. Suddenly, Diller became a guru of the new media age. Now, people from Wall Street to Wilshire Boulevard want to know: Where is Barry going?

On July 12, Diller gave at least one answer. With QVC's long-awaited proposal to merge with archrival Home Shopping Network Inc., he means to dominate electronic retailing. Together, QVC and Home Shopping will virtually corner this market. Without so much as redecorating a TV studio, Diller has put himself at the helm of a $2 billion media company.

DILLER: CORNERING THE MARKET

But nobody thinks Diller will stop there. Most media watchers take it for granted that the 52-year-old creator of Fox will transform home shopping. QVC wouldn't have a market value approaching that of CBS Inc. if investors expected anything less than revolution. It is Diller's grander ambitions that have people buzzing.

HEAVYWEIGHTS. Will he develop programming that combines entertainment with shopping? Will he make QVC a worldwide network? And the hottest question on the cocktail circuit: Will he use Home Shopping Network as the foundation for a fifth television network? "I see unlimited horizons," says Brian L. Roberts, president of Comcast Corp., who was instrumental in persuading Diller to invest in QVC. "This guy is unbelievable."

Characteristically, Diller is keeping his own counsel: "I have various ideas," he says, "but I'm not ready to share them." Diller does acknowledge, though, that a fifth entertainment network is likely to emerge to compete with the Big Three and Fox. And he wants to be involved.

That's no idle remark, given Diller's backers. In addition to cable operator Comcast, which owns 11.3% of QVC, he has the support of John C. Malone, the powerful CEO of Tele-Communications Inc. and chairman of Liberty Media Corp. Through Liberty, Malone controls Home Shopping Network. Among other things, this helps ensure that QVC's merger will go through.

What's more, Malone and Roberts have ceded Diller amazing latitude in charting QVC's future. Although Liberty's 22.3% stake in QVC dwarfs Diller's 3%, his partners have given him one-third voting control of the merged network. Says Roberts: "This is a genuine partnership. It's not Barry working for Malone."

No kidding: With QVC's stock zooming to a recent 71, Diller's 3% stake is now worth $59.6 million, $34 million more than when he joined. His stock options, which he can exercise in chunks through the next five years, are worth an additional $440 million.

MALONE: MORE DEALS?

To build a fifth network will require more than money, though. Media watchers offer this scenario: Diller could combine the 40 UHF affiliates of Home Shopping Network with 12 stations that HSN spun off to shareholders last December, but which the merger proposal gives him an option to buy back. HSN would confine its shopping shows to cable, while Diller would produce new shows for the network.

But that puts HSN in a tough spot. Roughly half of its 60 million households come through its broadcast stations. To make up for its loss, HSN would have to greatly expand its cable distribution at a time when channel space is already scarce. And even if digital compression leads to vastly more channels, that could render a fifth broadcast network less desirable.

PARAMOUNT IMPORTANCE. Also unclear is what Diller would put on a new network. He sees scant opportunity in fusing home shopping with traditional entertainment. Whatever way he goes, Diller has some intriguing options. Rumors have Malone discussing a deal with Paramount Communications Inc., which could offer Diller seven stations and a programming arm that has created such gems as *Cheers* and *Star Trek: Deep Space Nine*. All three players declined to comment.

Linking up with Paramount would be an ironic move, even by Diller's standards. He ran Paramount Pictures Corp. until 1984, when he clashed with Paramount Chairman Martin S. Davis and left for Fox. But already, Diller has joined with one former boss, Rupert Murdoch, to distribute QVC overseas. A deal with Davis would prove that in Diller's multimedia world, no scenario is too farfetched.

By Mark Landler in New York and Ronald Grover in Los Angeles

out the lowbrow image of TV retailing the past. HSN, he argues, is simply e mass-merchant—the Wal-Mart or rget—at one end of the video mall. 'e expect to launch additional chan- ls that serve a number of different stomers," he says. "The opportunities offer the same retailing options in ms of customer segments that are ailable in the mall are going be avail- e through your tele- ion."

Whoa. Does that ean video shopping l simply cannibalize re sales? Retailers, velopers, and sociol- ists think not (page . "The shopping-cen- industry has been dressing the ques- n of home shop- ng," says Paul F. stner, senior vice- esident of marketing the O'Connor oup, which has in- ests in 22 shopping lls. Kastner believes t retail stores "tran- end" shopping by oviding entertain- ent.

And retailers say ey see home shop- g as a vehicle to ex- nd their reach and elerate their sales—other words, a way increase distribu- n, not reallocate it. his will never take ay from shopping in stores," predicts trick Adkisson, Nordstrom's opera- ns and business development manag- "People like the social experience of opping. We think they may see some- ng on TV and then go into the store d buy it."

For catalog merchants, the potential self-pirating seems more ominous. ter all, home shoppers in effect use eir televisions as noisy, electronic cat- gs that provide instant gratification. t like the department-store folks, cat- g retailers insist TV will help them ther than hurt. Says Fingerhut Cos. O Theodore Deikel: "The catalog will vays be the dominant vehicle [for us], d television will augment those sales." May, Deikel signed a deal with ABC to oduce infomercials for three of Capital ties/ABC's cable channels: Lifetime, PN, and Arts & Entertainment. The geted audiences of these channels ake them appealing to marketers. ngerhut, for example, will sell sports d fitness gear on ESPN and household ms on Lifetime, whose audience is stly women.

Macy's figures it doesn't even need to piggyback on someone else's targeted channel. The retailer, which has been operating under Chapter 11 bankruptcy protection since 1992, has formed an ambitious plan to launch *TV Macy's*, its own 24-hour shopping channel. Its partners are Cablevision Systems Corp., a cable operator on Long Island; *Sixty Minutes* Executive Producer Don Hewitt; former CBS Executive Vice-President Tom Leahy; and HSN, whose back offices will take orders and ship products.

Macy's executives have been uncharacteristically reticent about their plans for *TV Macy's* except to say that they hope eventually to capture 15 million to 20 million subscribers. Says one partner, Charles F. Dolan, chairman of Cablevision: "We're banking heavily on the impact of the Macy's name and the fact that they are wonderful merchants."

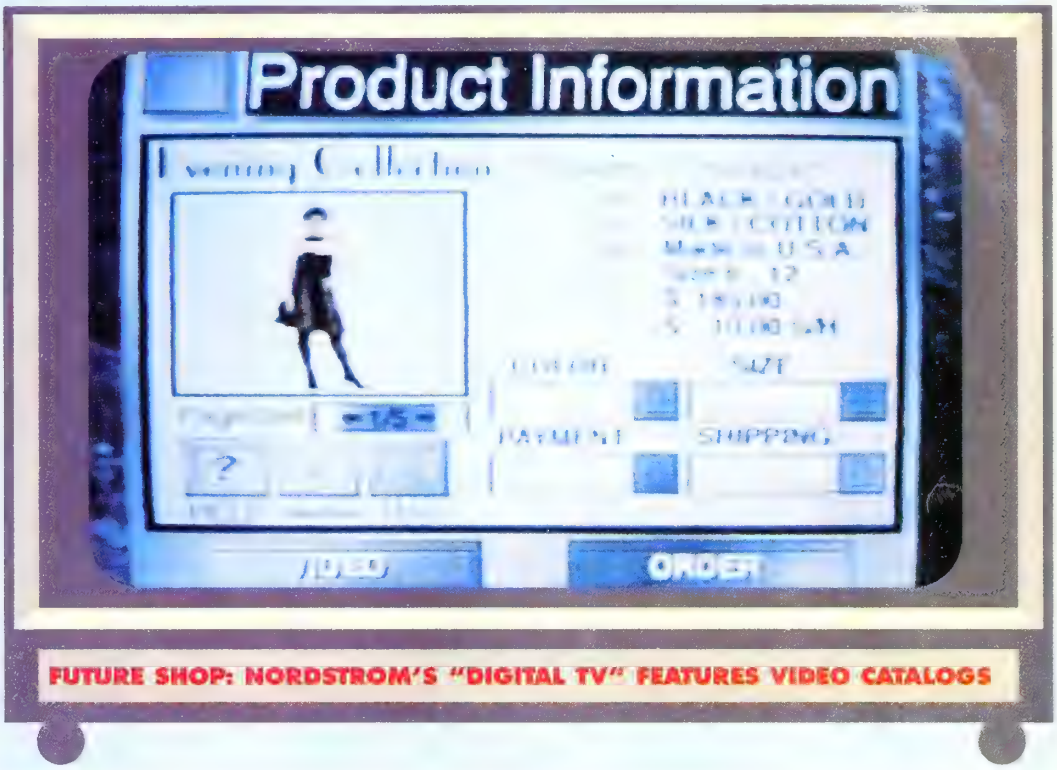
TWICE BURNED. A cautionary note, however: One big retailer that launched its own channel early on has already seen it sink. In 1991, Penney pulled the plug on the J. C. Penney Home Shopping Network after 18 months. The channel reached about 15 million homes in 725 markets. Trouble was, some of those markets overlapped with QVC, which offered a wider range of merchandise than Penney. As a result, the channel "never lived up to our expectations," says Al Bell, Penney's catalog director for strategic planning.

Penney also spent $106 million on Telaction, a cable-TV-based home shopping system that offered better-quality merchandise and a larger selection than had traditionally been associated with home shopping. But Telaction folded in April, 1989, after two years, never having expanded beyond the Chicago suburbs in which it started.

But even getting burnt twice hasn't made Penney home shopping shy. In September, the retailer will participate in testing *TVAnswer*, an interactive video service. Using a black box and remote control, customers will be able to order from Penney catalogs interactively via radio and satellite frequencies.

Seattle-based Nordstrom has even more futuristic visions. The upscale retailer recently produced a 12-minute video depicting a service called "Digital interactive TV" in an effort to present the store's vision of its interactive future. In Nordstrom's notion of the video mall, a well-dressed mother browses through video catalogs and magazines, talks by video telephone with her personal shopper, and watches a video about Nordstrom's black blazers. She freezes the frame on items of interest, orders the merchandise, and charges it to her "Market Center" account. It all looks very easy. Another idea, says Nordstrom's Adkisson, is to combine this interactive shopping experience with movie viewing.

How's that? "Let's say you're watching a *Batman* movie and Catwoman is wearing a black teddy," says Adkisson. "You could pause the movie and find out



FUTURE SHOP: NORDSTROM'S "DIGITAL TV" FEATURES VIDEO CATALOGS

PHOTOGRAPH BY PETER FREED; ILLUSTRATION BY RAY VELLA, BW

where you could buy the same one and order it right then." How close is Nordstrom making "shopping from the movies" happen? At the moment, not very. Adkisson says the company will participate in three to four trials next year that may involve 10,000 homes at most, but it has not committed any money toward developing its own technology.

It may take retailers years to fine-tune their strategies for the video mall. Even when technology catches up to their visions, and millions of American homes are eventually equipped with the software that turns idiot boxes into smart TVs, merchants face huge marketing hurdles. Hiring the right spokespeople, developing the right spiels, and finding the right time slots to hawk their products will be critical to success in this fast-changing medium. But whatever they do, they can't afford to turn up their noses at home shopping ever again. There are already too many addicts out there crying for more.

By Laura Zinn in West Chester, Pa. with Gail De George in Miami, Rochelle Shoretz in New York, Dori Jones Yang in Seattle, Stephanie Anderson Forest in Dallas, and bureau reports

Commentary/by Joan Warner

HOME SHOPPING HAS TO BEAT THE SIREN SONG OF THE STORE

When the going gets tough, runs the wry motto, the tough go shopping. It's a concise way of saying that for Americans, amassing goods is a psychic activity—an outlet for exuberance or misery not unlike having a Friday-night martini. In fact, the urge to shop is a neurological response: Doctors consider it a key symptom of manic illness. Dear to the capitalist soul, shopping encompasses far more than the recurrent need to stock up on socks.

So when retailers bet on television as the pot of gold at the end of their economic rainbow, they're gambling that shopping in your living room will deliver the same emotional bang for your buck as shopping in a store. To succeed, they will have to replicate through television a subtle combination of entertainment, ego gratification, and pragmatic benefits. That's a lot to ask from the medium that created couch potatoes. "So far, home shopping has been a cultural joke," sniffs Judith Langer, president of market-research firm Langer Associates.

HIDDEN MOTIVES. Sociologists can identify a long list of hidden dimensions involved in the store-shopping experience that solitary button-pushing cannot satisfy. The companionship of a mother and daughter who sally forth to pick out a new dress, or the bonding rituals of teenagers who meet at the record store every Saturday, can turn shopping into an important social event.

Even the more private aspects of shopping—taking an hour off from work to buy yourself a treat, or enjoying the attentions of an obsequious salesperson—require for their pleasure that you leave your ordinary environment to do something special. Indeed, William Wilkie, marketing professor at the University of Notre Dame and author of the textbook *Consumer Behavior*, believes the desire for sensory stimulus—light, color, movement, scent, and sound—is a major motive when people go shopping.

Americans also use shopping for exercise: Mall-walking has become a popular suburban workout. And for a family pinching pennies, an evening in the mall's food court can provide an inexpensive entertainment option—having a bite and watching the world go by. "The mall is the village green of our era," says Langer.

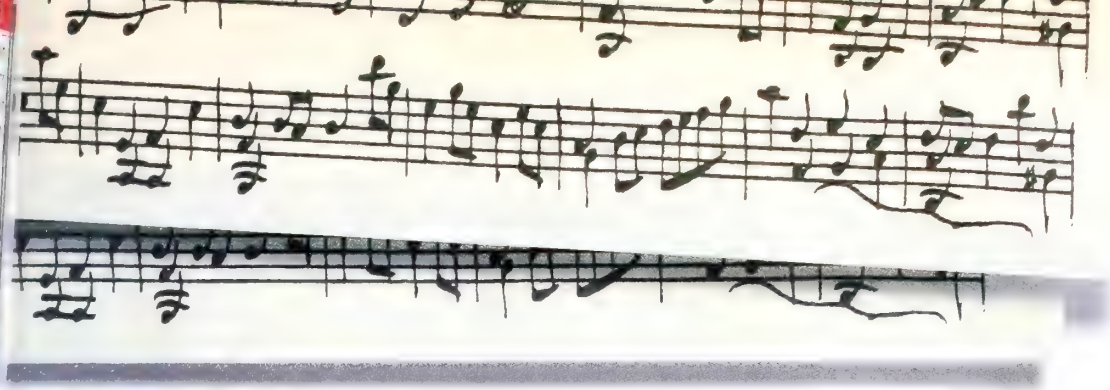
To be sure, lots of people hate the experience. Barbara Caplan, a director at Yankelovich Partners in Westport, Conn., says her firm's data show consumers are increasingly dissatisfied with traditional retail outlets. "There are things retailers won't want to replicate [on television]: hassle, frustration, angst, and exhaustion," she says. With convenience and efficiency more desirable than ever, TV retailers hope to win over busy professionals who would rather sleep than go searching for a new winter coat.

MATTER OF FAITH. But to do that, merchants must work around a fundamental drawback of TV as a sales medium: no reality. If customers can't kick the tires, feel the fabric, or try on the shoes, their trust in the seller must be that much greater, especially for big-ticket purchases. Retailers will have to build on their reputations, offer lots of choices, and make returns easy.

The seductive hard sell of today's late-night home-shopping shows ("Only five left! And they're the only ones of their kind!") has to evolve into informative pitches that allow consumers to make unhurried decisions that they won't regret the next day.

So far, home shoppers remain a blip on the retail sales screen, accounting for just 1% to 2% of the shopping population. Even if this number grows exponentially, it's unlikely that store shopping will go the way of the hula hoop. For retailers, that could mean a win-win situation: When the going gets tough, some people will hit the stores, and others will drown their sorrows in electronic acquisition.

Warner is BUSINESS WEEK's marketing editor.



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can't seem

to get in tune.

Marketing

is fiddling around

on their own.

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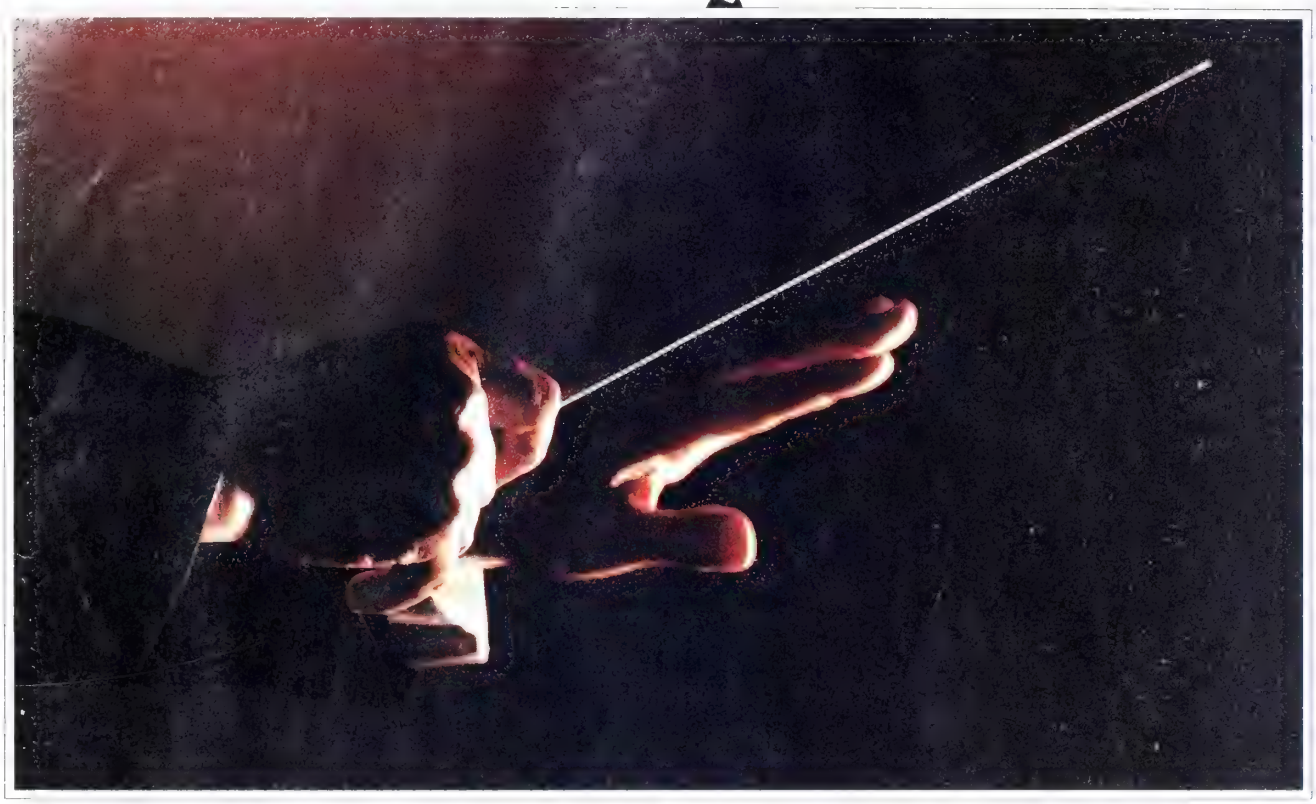

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INVENTORS

WHAT DO DOGS, GUITARS, AND CHOPPERS HAVE IN COMMON?

Inventor Charles Kaman has tinkered with all of them

It's a warm July morning, and Charles H. Kaman is standing in the old tobacco fields of northern Connecticut watching a test pilot fly about in a brand-new, light helicopter. Kaman designed the chopper himself. The gleam in his eye says as much. Kaman has been fascinated with flight since he was a boy in Washington, D.C. Then, the fields were local playgrounds, and the aircraft were balsa-wood models powered by rubber bands.

Charlie Kaman may be the founder and CEO of Kaman Corp., an $810 million conglomerate in Bloomfield, Conn. But the 74-year-old engineer is still a wide-eyed inventor first, executive second. In the 1940s, he helped pioneer the development of the helicopter by giving the machines flaps that added stability. Along the way, he designed the Ovation acoustic guitar—the first to use composite materials in place of wood. He also succeeded in breeding a strain of German Shepherd dog largely free of debilitating hip dysplasia. "He's a modern-day Leonardo," says investor Jonathan Bush, brother of the former President. "He's as accomplished a person as I have known in my life."

SLUMP TIME. Kaman Corp. will need all of its founder's vision and skill in the coming years as it attempts to navigate in a world of shrinking defense spending and weak commercial aviation markets. Kaman rode high on the Reagan military boom, helping develop nuclear weapons and antisubmarine technology in addition to helicopters and aircraft parts (table). Sales and profits doubled between 1980 and 1990. Now, however, defense cuts and the airline slump are boding ill. While the $810 million in projected 1993 sales would top 1992's results, that still trails a peak of $827 million in 1990.

So Kaman is back at the drawing board. His goal is to launch a lightweight commercial helicopter designed to ferry payloads rather than people. Among its uses: pulling logs out of forests to avoid using environmentally destructive roads. Based on simple concepts, the K-Max chopper is a single-engine machine that will be leased for about $1 million a year for up to 1,000 hours of use. "It's an extremely viable product," says analyst Mark Bobbi of Forecast International, an aviation consulting firm based in Newtown, Conn. "The question is: Will it be cost-effective?" That won't be known until the K-Max hits the market early next year. As yet, there's no real competition.

To build the machine, Kaman is drawing on a lifetime of aerospace achievement. His K-225—the first gas-turbine-powered chopper—now sits in the Smithsonian Institution's National Air & Space Museum. "There's a whole goddamn 50 years of experience in there," Kaman says of his newest creation. Those in the know believe that could give the K-Max an edge. "If anybody can pull it off, Charlie can," says Harry Gray, former CEO of United Technologies Corp., the parent of a rival helicopter manufacturer.

AUDACITY. Kaman grew up in Washington, the son of a German immigrant. The elder Kaman was a construction supervisor who oversaw work on the Supreme Court building and Union Station, despite his second-grade education. Charlie had loftier ambitions. A botched tonsillectomy had left him deaf in one ear and kept him from fulfilling his dream of becoming a professional pilot. So after graduating from Washington's Catholic University in 1940, he went on to build flying machines. Kaman took a job at United Aircraft (now United Technologies), where helicopter pioneer Igor Sikorsky held court. By 1943 he had become the head of aerodynamics.

In 1945, Kaman had the audacity to suggest a way of improving the stability of United's helicopters. He favored putting flaps on the main rotor and doing away with the tail rotor altogether, thereby making the choppers easier to control. Don't bother, he was told, the company already had one hotshot inventor and didn't need another. Kaman's answer was to form his own company around a homemade test rig that he had built from junk parts. It featured the engine of a 1933 Pontiac and the rear end of an old Dodge.

Over the years, Kaman built a succession of helicopters. The Husky was used in Vietnam to rescue downed pilots, and the SH-2 antisubma

KAMAN, 74: "MODERN-DAY LEONARDO"

THE DIVERSE WORLD OF KAMAN CORP.

REVENUES* $810 million **PROFITS*** $18 million

AEROSPACE Prime contractor for Navy's SH-2 antisubmarine helicopter. Supplies components for Patriot missile, software for Air Force's Space Command, and parts for Boeing aircraft and GE jet engines. Developing the K-Max, a lightweight commercial helicopter designed to lift heavy loads.

MUSIC Builds Ovation round-back acoustic guitar. Distributes amplifiers, PA systems, and instruments to music stores.

INDUSTRIAL Supplies bearings, sensors, chains, and other parts for use in process control and factory automation.

*Estimate for 1993 SALES VALUE LINE, KAMAN CORP.

e aircraft is still being used by the vy. Kaman moved into other defense rk and built up a business distributing ustrial parts. But his inventiveness n't stop with just machines.

A longtime guitar player (he once ned down a $75-a-week job with the nmy Dorsey band), Kaman's Martin ustic developed a warped neck in the ly 1960s. Seeking help, he visited the rtin factory in Pennslyvania. At the e, Kaman's board was urging him to ersify away from heavy dependence the Pentagon. "We looked at boats, nis racquets, and golf clubs, but noth- fit," Kaman recalls. Then he saw the imitive" methods used to make qual- acoustic guitars. Kaman's modern duction techniques, he figured, could used to make the instruments more ciently.

OD VIBRATIONS. Kaman offered to Martin, but the owners were happy h the way they made guitars. Unde- red, he used a knowledge of harmon- gained from building helicopter rotors design a guitar that could use com- ites instead of wood and still have a ural sound. "In a helicopter, you take ration out," he explains matter-of- ly. "In guitars, you put it in." So was n the best-selling Ovation guitar, with famed round-back design.

t was the same need to fix a nagging blem that led Kaman to design a canine. A dog-lover who had Ger- n Shepherds as pets, he was aware t years of inbreeding had left many h a hip-displacement problem that rtened their lives. Working with a rtford orthopedic surgeon, Kaman ap- ached the problem like an engineer ting out a bad engine part. "It's a se bearing that doesn't work right," explains.

The first step was to trace the ge- ic lineage of the shepherds. By apply- rigorous breeding standards and eding out dogs with weak muscle icture, Kaman and his wife, Roberta, re able to breed a largely disease- e strain of dog. They then went a further, forming the Fidelco Guide Foundation. Supported by contri- ions, Fidelco raises the animals as ing-eye dogs for the blind.

Even Kaman's yard poses an engi- ring challenge. When he isn't at the ce or working with his dogs, he has n spotted astride a bulldozer, moving lders around his 25-acre homestead nearby Farmington. To halt the soil sion on his uneven acreage, Kaman t a 300-foot, New England-style stone l using no mortar. "I made no draw- s, I just did it straight out of my d," he says. Anyone who has watched rlie Kaman over the years would e expected no less.

By Tim Smart in Bloomfield, Conn.

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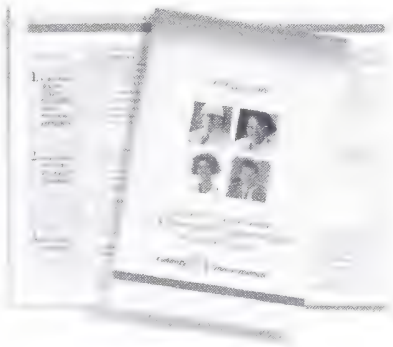

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A RADICAL SHIFT IN FOCUS FOR POLAROID

The plan is to have electronic imaging displace cameras and film as the photo giant's core business

In 1989, Polaroid Corp.'s chief executive, I. MacAllister Booth, hoped to fend off a hostile takeover by giving big shareholders a glimpse into Polaroid's research lab. At the time, the ailing company was developing a sleek, new instant camera. Equally impressive: an electronic imaging system to print out X-rays without costly chemical development. Both projects, Booth argued, would energize Polaroid's lackluster sales and reverse its declining profits. Stockholders, impressed with the new products, agreed. The takeover attempt by Shamrock Holdings Inc. failed.

Unfortunately, the future didn't quite develop the way Booth pictured it. Polaroid's latest instant camera, the Captiva, which is now being shipped to U. S. retailers, is receiving mixed reviews. And the Helios Laser Imaging System that Booth believed would propel the company into the high-tech age is struggling to find a market among medical-equipment makers. Worse, the profit growth that shareholders long for has yet to materialize (chart).

So what does Booth do now? Polaroid's CEO vows to abandon his company's longstanding two-track strategy. He says he will accelerate the push into electronic imaging—even at the expense of Polaroid's bread-and-butter photo business. To help cut costs during the transition into electronics, Booth plans to slash by a third the $75 million the company spends on photo research and development each year. "There are many more opportunities in the business world than just selling cameras and films," Booth says. His goal: a $2 billion electronics business by 2000. And he predicts that Polaroid's profits will resume an upward trajectory, with operating earnings climbing by 12% to 14% a year.

CHEERS. Booth's decision finally to de-emphasize instant photography, which accounts for 85% of Polaroid's business, has been warmly greeted on Wall Street. The stock has jumped by more than 30% since late March, to around 37. Also cheering investors is an anticipated profit rebound in 1994. Startup costs for Helios and Captiva will gobble at least $70 million this year. But as those expenses wind down, margins should rise sharply next year, says analyst Peter J. Enderlin of Smith Barney, Harris Upham & Co. He sees 1994 profits advancing by about 85% over his 1993 estimate, to $135 million, with revenues rising 8%, to $2.5 billion.

There's just one problem: Polaroid is cutting back investment in what it knows best to push into fast-moving markets in which it doesn't yet have any successful new products. Indeed, the company's electronics sales totaled just $43 million last year. "Polaroid may be giving up too much in its core photography business and hoping for too much in new businesses," says Enderlin.

And does the move away from conventional photography sound familiar? If so, it's because Polaroid's strategy is remarkably similar to that of its troubled Rochester (N.Y.) rival, Eastman Kodak Co. Like Kodak, Polaroid went on an acquisition binge after Sony Corp. startled the world in 1982 with an all-electronic camera. Polaroid acquired a mishmash of fiber-optic, ink-jet printer and medical-diagnostics operations. Poor results later prompted Booth to fold or sell off every one. Also like Kodak, Polaroid has a penchant for restructuring. Since 1988, it has reorganized itself three times. The most recent shuf

THE NEW CAPTIVA IS THE BIGGEST —AND THE LAST— MULTIYEAR "MEGADESIGN" EFFORT IN CAMERAS

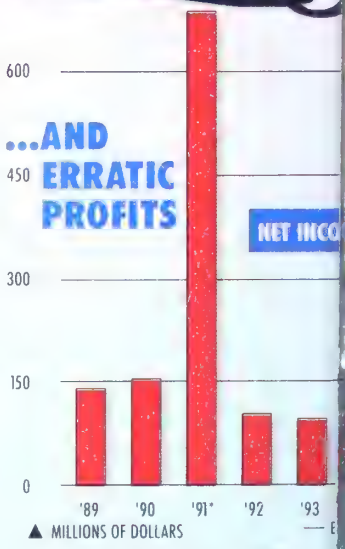
POLAROID'S STEEP HURDLES...

ELECTRONIC SYSTEMS Polaroid hopes to build a $2 billion business in medical imaging, graphic arts, and computer printers. But first products are late and need fine-tuning to meet market needs.

INSTANT CAMERAS The company faces a daunting marketing task in this era of video camcorders. The new Captiva camera is easy to use and compact. Retailers are skeptical, though, because of the small picture it produces.

COMPETITION As Polaroid begins to cut film R&D spending to finance its electronics push, Japan's Fuji Photo Film is expanding its instant film to European markets. On the electronics side, Polaroid faces stiff competition from rivals such as Sony.

...AND ERRATIC PROFITS



*INCLUDES $872 MILLION FROM PATENT SUIT SETT

DATA: COMPANY REPORTS, MORGAN STANLEY & CO., BUSINESS WEEK

came last fall, when it rearranged businesses into three divisions: film l videotape products, medical and phics systems, and other electronic ducts.

Still, Booth's latest strategy repre-ts a radical departure for the Cam-dge (Mass.) photography company. ile it began experimenting with elec-nic imaging in the 1980s, the company t invented instant photography al-ys considered the film business its e. But getting consumers, whose busi-s accounts for one-third of revenues, snap more pictures has been diffi-t—especially in an era of camcorders. ile camera sales last year were up a rd since 1990, to 4 million units, film es remain stuck at about $1.4 billion—same as in 1989.

ONG DIRECTION? Polaroid's latest shot a consumer revival may not help ch. The Captiva camera goes on sale he U. S. in late July, but many retail-wonder whether consumers will rm to Polaroid's new instant-photogra-y product. The small camera produces ally small prints—almost 50% smaller n Polaroid's existing snapshots, which asure almost 3 inches by 4 inches. h even larger 4-by-6 prints the fast-growing size at photo labs, "I would e to question" the appeal of a small-print, says David Ritz, president of -store chain Ritz Camera Centers Inc. For the moment, Polaroid isn't listening to such naysayers. "We did extensive testing to find the acceptable trade-off between camera size and picture size," says Joseph R. Oldfield, head of Polaroid's photography business. Indeed, Polaroid expects the camera, which is just two-thirds the size of its OneStep, to be a big draw among consumers put off by the bulkiness of instant cameras. While the Captiva has been available in Europe for six months, Oldfield won't divulge sales figures except to say that they're "exceeding our expectations."

POLAROID IS BETTING ITS FUTURE ON A FIELD IN WHICH IT DOESN'T HAVE A WINNING PRODUCT

Polaroid can't afford a poor showing. Captiva is the most researched product in the company's 56-year history—five years and $100 million in the making. And it will be launched with a splashy, $30 million marketing campaign. Morgan Stanley & Co. analyst Brenda Lee Landry says Captiva must drive camera sales to 5 million units a year to achieve profit targets. Booth calls the estimate "achievable."

Still, even Polaroid acknowledges that the company's future no longer lies in instant photography. That's why Booth, 61, a cautious manager who has spent his entire career at Polaroid, is pushing into electronic imaging. So far, he's focusing on markets such as medical imaging and graphic arts. There, he hopes to marry Polaroid's chemical and coating expertise to new technology. The result: electronically produced "hardcopy" images, such as printers' page proofs, that don't require conventional processing.

Helios is the key piece of Booth's strategy. Using laser technology, it reproduces an image on a carbon-coated polyester film that Polaroid makes, eliminating the wet chemicals of X-ray and other body-scan films. Once Helios is on track, Polaroid hopes to use the technology in a graphic-arts system for catalog and magazine printers.

To help pay for its electronics R&D, Polaroid is hoping to squeeze more out of the camera-and-film business. The company says Captiva will be its last "megadesign" project. Most new cameras will simply be modifications of existing models, says Oldfield. Polaroid's ProCam is a good example of the frugal new approach. Roughly 75% of the parts in the camera were designed previously for other cameras. Oldfield says that lowered ProCam's development costs to just 35% of traditional outlays.

Despite Booth's commitment to electronics, Helios has run into problems. First introduced in 1990, the system has been sold to several hospitals. But Polaroid has yet to find a medical-equipment manufacturer to incorporate Helios as a standard printer with its imaging products. And that's critical if Polaroid is to develop a sizable market. The problem: Helios makes an 8-by-10 print instead of the 14-by-17 size preferred by doctors who read X-rays and CAT scans.

COLD SHOULDERS. What's more, Polaroid hasn't cracked the ultrasound business, where the smaller-size prints are the norm. That's because most hospitals now use less sophisticated laser-printer technology made by Sony or Agfa. And those printers can also produce the bigger images needed by other departments. Acuson Corp., for example, bypassed Helios for its new Aegis digital ultrasound machine largely because it felt hospitals weren't interested.

Booth acknowledges that the transition from instant photography to electronic imaging will need fine-tuning along the way. Already, Polaroid is planning to modify Helios to produce the larger prints desired by physicians. Still, Booth says the big benefits of the electronics push should be apparent by 1995. Shareholders who had such high hopes for Polaroid's new products undoubtedly hope that's true.

By Gary McWilliams in Cambridge, Mass.

CEO BOOTH: PHOTOGRAPHY R&D FUNDING WILL BE SLASHED BY A THIRD

PHOTOGRAPH BY JOHN S. ABBOTT; CHARTS BY ERIC HOFFMAN/NEW

A DEAL THAT'S LOOKING DUBIOUSER AND DUBIOUSER

A Crown American stock offering, led by Kidder, leaves some investors skeptical

Frank J. Pasquerilla likes to make a big impression. The $27 million headquarters of his Johnstown (Pa.)-based Crown American Corp. was designed by postmodern architect Michael Graves. It features a massive rotunda and a pyramid housing the executive offices. Soon, the 66-year-old Pasquerilla, patriarch of one of the nation's largest private hotel and shopping center developers, hopes to operate on an even grander scale. He wants to transform Crown American into the largest equity real estate investment trust (REIT) that Wall Street has ever seen. In August, with the help of investment banking firm Kidder, Peabody & Co., Crown American hopes to float an initial public offering that it anticipates will raise at least $400 million, enabling it to reduce its burdensome debt load and assuage nervous lenders.

But Pasquerilla may find the Wall Street environment less welcoming than Johnstown. Although the road show discussing the deal with prospective investors hasn't started and the deal hasn't been priced, several analysts have raised questions about its properties, management, growth prospects, and potential conflicts of interest. "It's a very curious deal, and everyone is scratching their heads and saying, 'How is Kidder going to do it?'" says Barry Vinocur, editor of the *Realty Stock Review* in Shrewsbury, N. J.

BAILOUT? Crown American isn't the only REIT offering that's raised controversy recently. REIT stocks have been highfliers for the past two years. But concern is growing on Wall Street that deals in the pipeline are more akin to bailouts for developers and their creditors than good investment opportunities. If the Crown offering doesn't fly, the company's financial troubles could intensify. The reputation of lead underwriter Kidder Peabody, which hopes to make its mark in the REIT arena with the Crown deal, is also on the line. Kidder and Crown American, citing Securities & Exchange Commission rules barring promoting a deal in registration, declined to comment. But sources close to the deal say the soon-to-commence road show may quell some critics' concerns.

The late 1980s weren't good times for Crown. As a result of overbuilding, overleveraging, and a weak economy, the company lost money the last three fiscal years and went through a debt restructuring with bank creditors in August, 1991. A number of the anchor tenants in its enclosed shopping malls filed for bankruptcy within the past five years. The list of its mall anchors reads like a *Who's Who* of retailers with financial woes: Ames Department Stores, which recently emerged from bankruptcy, Hills Department Stores, Phar-Mor. Currently an anchor at 15 of the malls, Hess's Department Stores recently left bankruptcy court after completing a debt restructuring with creditors.

Many of the worries about the Crown American offering center on the fact that Crown, which will have a 40% inter

CROWN'S JEWEL: IT HOPES TO FLOAT A $400 MILLION IPO

A REALLY RISKY REIT?

SHAKY TENANTS Several of Crown American's mall anchors, including Hess's Department Stores, are experiencing financial difficulty. Four chains with 10 anchor stores have filed for bankruptcy over the past 5 years.

POTENTIAL CONFLICT OF INTEREST Crown owns Hess's, which will be one of the real estate investment trust's largest tenants. Analysts worry that could influence leasing decisions.

CONTROVERSIAL DEAL STRUCTURE The REIT's managers contributed all of its properties in return for interests in the REIT. For tax reasons, the managers might be loath to sell properties even though that might benefit investors.

DEPTH OF MANAGEMENT Crown CEO Frank Pasquerilla, 66, is a longtime developer, but analysts say son and heir apparent Mark Pasquerilla, 34, lacks hands-on experience.

DATA: BUSINESS WEEK

in the REIT, owns 100% of Hess's. ven if Hess's were a healthy retailer, would probably be a problem," says ocur. "It puts Crown American into a ition where one of its largest tenants itself. It's a lot like negotiating with rself for a pay raise."

The company has tried to allay such rs with provisions such as one requir- that "a majority of the REIT's inde- ndent trustees unaffiliated with own must approve transactions involv- Hess's, including new leases," as the l's prospectus puts it. Skeptics can estion how independent the trustees l be. One will be Clifford A. Barton, sident of U. S. Bancorp in Johnstown il his retirement in January, 1994. ank Pasquerilla is a director of U. S. ncorp and is a beneficial owner of 1% the company's stock. U. S. Bancorp is o a "co-trustee under certain trusts ich hold nonvoting stock of Crown erican," notes the prospectus. Barton ld not be reached for comment.

CHOR QUALITY. Some analysts worry out Crown's business prospects. "The gest issue isn't the conflict with ss's but the quality of anchors," says Fosheim, one of two principals at een Street Advisors, an institutional T research firm in Newport Beach, lif.. While the average sales per are foot for Crown's anchors was 8 in 1992, the one Wal-Mart anchor d $349 in sales per square foot. And ile Crown has recently begun adding l-Mart Stores Inc. anchors to its lls, Wal-Mart is also a strong competi- on Crown's home turf. "A lot of their perties are in Pennsylvania, and Wal- rt is moving into this area for the t time in a major way," says Vinocur. Analysts say the outlook for cash flow wth is troubling. "We think on the hand that the assets are pretty solid, t the company knows what it's doing, there isn't tremendous growth" in own's middle-to-lower-middle market he in Pennsylvania, says Frederick F. rr Jr., a principal at the Penobscot oup Inc., a Boston-based real estate earch firm. He doesn't expect occu- ncy rates to rise dramatically. own's older malls are now 84% occu- d, and those recently constructed are % leased. Crown's relatively low occu- ncy rates may weaken its leverage en it tries to raise the below-average ts of tenants, which is part of its wth plan.

The most crucial element in any REIT management. "They're pretty good ple, and that's where you start," says hael T. Oliver, portfolio manager for Chicago-based PRA Real Estate Secu- es Fund. Analysts question the depth Crown's management, however, and somewhat uneasy with Mark E. Pas- rilla, 34, who has been with the company since 1983 and will be president of the REIT. "Whenever you have a dominant family patriarch, succession is always an issue," says Fosheim. "With the Pasquerilla deal, I think management is an issue. Mark never spent the time in the trenches that Frank has." Responds an analyst who has close ties to the company: "Mark is a guy who is on top of everything. He has a tremendous grasp of the issues and the numbers." But, he adds, "people who have seen the management think that Frank is more polished and has more vision than Mark."

Management becomes even more critical because Crown's REIT is structured as a partnership. That can lead to a conflict of interest. Under the tax laws, it may be in the REIT partners' interest to avoid selling its properties, thus incurring substantial taxes. Yet it may well be in the interest of REIT shareholders to unload poorly producing properties.

Crown's road show, scheduled to begin July 19, may alleviate some anxieties. But selling $400 million worth of stock to what appears to be a growing band of skeptical institutional buyers won't be easy. Pulling it off would indeed be a crowning achievement.

By Suzanne Woolley in New York

BANKING

THESE BRAHMINS ARE LEARNING TO HUSTLE

Bank of Boston is shedding its stuffiness to better its bottom line

It was an unlikely scene: As a photographer snapped away, Bank of Boston Corp. President Charles K. Gifford stood in the rain outside a LeeJay Bed & Bath retail store in Boston holding bags of bath accessories and an umbrella. The bank had lost out in a competition with two rivals to make a loan to LeeJay. Undaunted, Gifford sent one of the photos to LeeJay president Howard Israel with a note saying: "Our interest can't be dampened by rain or rejection." Says Israel: "I was blown away. Five years ago, they were so arrogant, even patronizing, they never would have even bid. They have totally changed."

Meet the new Bank of Boston. Once the epitome of stuffiness, the bank was abruptly brought down to earth three years ago by a serious brush with insolvency. "We were smug—damn sure of ourselves," says Gifford. "You won't see that kind of complacency around here any more." Now, instead of having their noses in the air, Bank of Boston loan officers are out trying to shake hands with anyone who's interested and doing whatever it takes to close deals. The shift in attitude isn't yet reflected in profits, and controlling expenses remains a challenge. But the change does show that even the most hidebound financial institution is capable of changing its ways.

"COUNTRY CLUB." Most striking is the 209-year-old Bank of Boston's cultural remake, engineered by Chairman and Chief Executive Ira Stepanian, 56, a 30-year Bank of Boston veteran with a low-key style who made a name for himself making big, complex corporate loans. The son of an Armenian immigrant and raised in a middle-class Boston suburb, Stepanian symbolizes the bank's attempt to move beyond its ingrained WASPiness. "We made some big mistakes," he says, but "people's views of themselves and the bank have changed." He has ended a long-standing star system, in which favored Ivy League Yankees were promoted from within and given top jobs, and hired four outsiders for his top management team. He initiated a "casual day" each month to allow headquarters employees to dress down. Numerous status symbols have been banished,

ERIC HOFFMANN/BW

such as the company helicopter, private dining rooms for senior officers, and formal, antique-filled executive suites. Corner offices are being turned into meeting rooms, symbolizing the push for more group problem-solving. Also gone: management's annual golf retreat, replaced by a day rebuilding a rural summer camp for inner-city youth. Stepanian is chipping away at the bank's insular business image, beefing up lending in Boston's poorer neighborhoods. "This was a country club, disconnected from reality," says Michael Simmons, executive vice-president for technology and operations.

All of this is in sharp contrast to an earlier culture that was so calcified that men were expected to wear jackets just to walk from floor to floor. The "First," as longtime Bostonians still call the bank, catered to the region's wealthiest blue-blood clans. In corporate banking, its specialty was big national accounts. Small-business lending and retail banking for the hoi polloi were left to its rivals, chiefly Bank of New England, Shawmut, and BayBanks.

Bank of Boston's conservatism unfortunately did not stop it from getting caught up in the lending euphoria of the 1980s. With a slew of loans to companies from Hollywood to Australia, its assets grew from $19 billion in 1983 to $37 billion in 1989. The company also made heavy investments in commercial real estate, and it strove to become a major player in the market for loans to below-investment-grade companies.

When the banking crisis hit New England in 1989, Bank of Boston was the first to get into trouble. It lost $395 million in 1990. Its stock dropped from over $30 a share to as low as $4. Its balance sheet was so imperiled that at one point more than 30 federal regulators arrived to scrutinize every facet of its operations. To improve its finances, regulators demanded that Bank of Boston raise capital, revise its lending practices, and improve internal controls.

NO BULL'S-EYE. Stepanian and Gifford, who moved into their current posts in 1989, have made those fixes and are now retooling the bank's strategy. The biggest change is a new focus on local markets. The bank is courting small businesses in New England for the first time in decades and plans to build up its retail franchise beyond its blue-blood base. It's also bolstering its regional presence by snapping up weaker rivals such as Multibank Financial Corp. and Society for Savings Bancorp Inc. The bank remains active in Latin America and is still lending nationally—but in carefully selected niches, such as energy services and cable TV.

All in all, an impressive list—but so far, all of this activity has produced only mixed results. Some analysts questio whether Stepanian, for all of his culture changing skills, is tough enough t make his rejiggering pay off on the bo tom line. "The bank's basic business i stagnant . . . and they've got a probler with their overhead costs," says Gerar S. Cassidy, an analys with Hancock Institu tional Equity Services Bank of Boston has ag gressively disposed o bad real estate loan much faster than it competitors have. Bu the bank's profits hav been flat for the last si quarters, and analyst expect a decline of a much as 10% in 1993, t about $235 million.

> INSTEAD OF GOING ON A GOLF RETREAT, MANAGERS SPENT A DAY REBUILDING A SUMMER CAMP FOR INNER-CITY YOUTH

The desultory Nev England market is partl to blame. Commercial lending has bee stalled for more than a year, and man bankers don't expect growth to pick u before 1994. Meanwhile, there's fierc competition for the few viable client banks want to reach. A "credit initia tive" launched by the Bank of Bosto last year resulted in $3.3 billion i new loan commitments and boost ed the standing of the bank in th small-business market. But Flee Financial Group Inc. in Prov dence, R. I., says it loaned $4. billion to New England business es during the first year of Ban of Boston's lending push. Reta banking isn't any easier. To wi over customers who have been ac customed to thinking of the ban as a commercial lender, Bank o Boston will probably have to ac vertise heavily and cut prices "Gaining market share will com at the expense of profitability, says Cassidy.

High expenses aren't helpin either. Stepanian imposed a hirin freeze in March, but that was af ter he added more than 1,000 nev employees in the last year to bo ster Latin American operation and other businesses. Tha pushed the bank's expense ratio well above the industry average

Bank of Boston deserves cred for getting rid of its stuffiness But as the episode with LeeJa Bed & Bath illustrates, the bank's nev image alone may not be enough to ger erate new business. If profitability keep lagging, investors may well start t wonder whether Stepanian should b less of a culture-changer and more of coldhearted banker.

By Geoffrey Smith in Bosto

CEO STEPANIAN: MOVING THE ONCE HIDEBOUND BANK BEYOND ITS YANKEE BLUE-BLOOD BASE

BUT WHAT HAVE YOU DONE FOR US LATELY?

uperstar Elaine Garzarelli has let down her mutual-fund clients

laine M. Garzarelli had already amassed a huge following on Wall Street when she made the call of e century. Weeks before the October, 87, stock market crash, the Shearson hman Bros. strategist urged her folwers to dump their stocks, and days fore, she warned that a op in the Dow Jones instrial average of at least 0 points was imminent. nyone who heeded her adonition will probably be rever grateful.

But those who've put eir money in her hands ice then have been sadly sappointed. True, the earson Lehman Bros. Sec- Analysis Fund, the mual fund the brokerage m launched in the sumer of 1987 to capitalize on r fame and talent, had a rrific start. Her monthsd fund dodged the crash d even made a little om it.

Since then, however, the nd has been a sorry also-ran. Every ar, it has underperformed the average S. diversified equity fund, and in four the years, it underperformed the andard & Poors 500 to boot (table). In e first half of 1993, the fund was barein the black, while the S&P 500 rerned 4.9%. In all, $1,000 invested at the art of 1988 would have been worth ,405 at the end of June, 1993, comred to $2,122 for the average U. S. nd and $2,190 for the S&P. Not surprisgly, investors have left in droves. om over $700 million in 1988, the fund s dwindled to less than $200 million.

Garzarelli's experience ows that it's a far cry om giving advice to makg real-world investment cisions. In February, 1988, e same indicators that reamed "sell" in 1987 rned bullish. But she igred her computer model d remained in cash. She er traded stocks furiously a failed effort to catch up. , while the S&P delivered a .6% return in 1988, Garzarelli's fund was a disaster—losing more than 13%. "Trading is not what I do well," she says.

Nor does she pretend to be a stockpicker. Garzarelli's models identify industry groups, or sectors, such as regional banks and newspaper stocks, her two most recent industry picks, which are expected to outperform the market. Her models, however, do not select stocks. She says 80% of her sector picks are profitable. A review of her "Attractive Industry Group" list by Coopers & Lybrand indicates that her industry picks beat the S&P 500 by an average of five percentage points a year. To buy individual stocks for the fund, Garzarelli chooses companies rated No. 1 and No. 2 by Shearson analysts. Obviously, many of those picks underperformed their groups.

GARZARELLI ACKNOWLEDGES: "TRADING IS NOT WHAT I DO WELL"

Garzarelli had a chance to redeem herself during the bear market of 1990. Her indicators turned bearish on July 7, when the Dow was just shy of 3000, but her superiors had forbidden her to sell out the fund without their permission. After days of trying to get an O. K., she says: "I was told I could do a little selling but I couldn't go entirely to cash." The fund sank as the Dow slid below 2400 into the fall. That was when her indicators turned bullish again, but her shareholders ended up in the red for 1990 anyway.

"EXORBITANT" PAY. Since then, she has remained steadfastly bullish. She thinks the Dow could reach 4000 by the spring of 1994 and does not foresee a significant market pullback until then.

Fortunately for Garzarelli, the fund is not her main source of income. That comes from commissions paid by institutional investors such as Fidelity Investments, T. Rowe Price, and the College Retirement Equity Fund. She writes voluminous reports and holds conference calls and face-to-face meetings with hundreds of clients every year. She also spends half her time on the road. For this, she says, "the company pays me an exorbitant amount of money"—believed to be in excess of $2 million.

With much of her own money invested in the fund, it's more than a matter of pride to turn it around. Garzarelli, who will remain with Lehman Bros. when Shearson merges with Smith Barney at the end of July, is negotiating with Lehman to set up her own investment management company. That would allow her to buy the fund from Shearson. She would then slash its fees, which drag down performance by eating up more than 2% a year, nearly twice the mutual-fund average. She's also considering cutting costs further by forgoing stock-picking and applying her market timing to an S&P index portfolio.

A Garzarelli management unit wouldn't just run one fund. She'd like to manage institutional and retail accounts as well and wants to pursue global investing. "I'm already building computer models for Japan, France, and Germany," she says. Still, the success of those ventures in enlisting new investors will depend on whether she can ride her also-ran fund into the winner's circle.

By Jeffrey M. Laderman in New York

A SORRY FUND PERFORMANCE

TOTAL RETURNS	1988	1989	1990	1991	1992	1st HALF 1993
GARZARELLI*	-13.1%	22.5%	-7.2%	31.5%	7.7%	0.5%
AVG. FUND**	15.7	25.1	-6.1	36.7	9.1	4.8
S&P500	16.6	31.7	-3.1	30.5	7.6	4.9

DATA: MORNINGSTAR INC.

JEANNE STRONGIN

BY GENE G. MARCIAL

YOU WON'T HEAR LORAL SINGING THE PENTAGON BLUES

When a company makes a secondary-share offering, its stock usually goes south, particularly if the shares being sold are owned by insiders. So when Loral, a high-tech company that makes electronic-warfare systems, offered 3 million shares at 53¾ on June 24, the Street expected the Big Board stock to dive—especially since the offered shares were owned by a group of Lehman Brothers partnerships. But instead of falling, the shares flew up, hitting a new high of 61¼ on July 12.

Considering that Loral's primary business is defense, with 80% of last year's revenues coming from the federal government, the stock's leap was quite a feat. But then, the stock had been climbing since January, when it traded at 46. What's the deal?

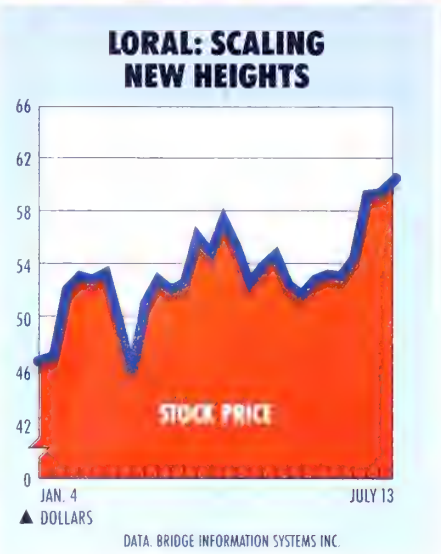
The simple answer, says Oppenheimer analyst Lior Bregman, is that Loral is a "very well-managed company capable of posting predictable, solid earnings that often exceed expectations." Its record over the past 15 years has been "unusually good, especially for a defense-related company," he adds. But wait—there's more.

The company is also widening its reach in satellite communications by expanding into the global cellular-telephone business. "One of our important projects is Globalstar," says Chairman and CEO Bernard Schwartz. The subsidiary will provide telecommunications services worldwide through 48 low-orbiting satellites and local-service telephone providers.

HELPING HANDS. Scheduled for a 1997 debut, Globalstar's system will enable subscribers to reach anybody around the world. Schwartz expects an initial sign-up of 5.6 million users. Loral has four European partners in its space-communications business, including France's Alcatel and Germany's Deutsche Aerospace. "Loral is positioning itself in the emerging areas of satellite, telephone, and TV broadcasting at relatively little risk," says Bregman. "Globalstar is Loral's wild card."

That doesn't mean Loral is cutting back on its military business, whose products include ships, satellite communications, and surveillance systems for aircraft, as well as tactical weapons, including those used in Desert Storm and the recent U. S. attack on Baghdad's intelligence headquarters. Despite the shrinking U. S. defense budget, Loral has been trying to beef up its core business, mainly through acquisitions. Recent buys include Ford's aerospace unit in 1991 and LTV's missile division in 1992. Loral sees another acquisition in 1993.

Kidder Peabody analyst Michael Lauer says there's "plenty of propellant left in the stock" despite its strong performance this year. He expects it to hit 75 over the next 12 months, based on his earnings estimates of $5.15 a share in the year ending Mar. 30, 1994, and $5.75 in 1995 vs. fiscal 1993's $4.62.



SPIELBERG'S SECRET WEAPON

Want a play on *Jurassic Park*? Some pros are riding the movie's success by buying shares of Softimage, a leading provider of 3-D animation software to video- and filmmakers. Its flagship product, Creative Environment, was used to animate the dinosaurs in the Steven Spielberg blockbuster.

"The stock has yet to reflect the company's prospects in animation," says portfolio manager and analyst Charles Finnie of San Francisco's Volpe Welty. Softimage's products let filmmakers, broadcasters, and graphic artists create high-quality 3-D imagery. But until recently, the company couldn't talk about its major role in *Jurassic Park* because of a nondisclosure agreement with Industrial Light & Magic, the George Lucas special-effects studio. The pact has now expired.

Finnie says 3-D animation is currently just a small part of the $3 billion film market. So Softimage is also targeting videogame makers, which have yet to embrace 3-D.

So far, the Montreal-based company has been growing nicely. Sales are expected to jump from last year's $14 million to an estimated $28 million for the year ending Oct. 30, 1993, and to $45 million in fiscal 1994. Finnie also sees profits rising fast, to 71¢ a share this year and $1.10 next year, vs. 1992's 60¢. The stock, now at 19, should hit the mid-30s in a year, he says.

A GLOBAL PUSH FOR BETTER GUMS

A lot of people have given up on Xytronyx—with good reason. The stock has been one of the big losers of the past two years. After hitting a high of 26 in late 1991, it headed downhill, to a low of 6 by early 1993. Recently, however, some aggressive players have been snapping up shares, driving the stock up to 10.

It's not just bottom-fishing. One New York money manager says Xytronyx, which has produced a test kit for detection of periodontal disease, will turn a profit in the last quarter of the year, ending Mar. 31, 1994. The year will still close with a loss, but he sees net of $1 a share in 1995.

Those earnings will come even before the Food & Drug Administration approves the product for the U. S. market, says Aaron Lehmann, president of Fulton Group, a research boutique in Greenwich, Conn. Part of his optimism is based on an exclusive agreement Xytronyx signed in May with Japan's Sumitomo Bank to find a partner to market the periodontal kit in that country.

The pact is part of Xytronyx' new strategy to aggressively market the kit outside the U. S. Colgate-Palmolive has worldwide rights to distribute it outside of China and Japan. Colgate recently ordered 50,000 kits to sell primarily in Britain and Australia. Xytronyx also has signed a deal with Asia Link, to seek regulatory approval and sell the kits in China, where periodontal disease is widespread.

Lehmann is optimistic about Xytronyx' other products, too, including an ink called Kephra he says can be used on natural or synthetic fiber or be incorporated into plastics or metals. Its special feature is an ability to change colors when hit by ultraviolet light.

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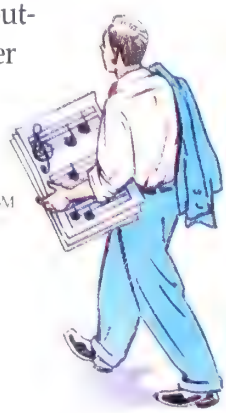

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Developments to Watch

EDITED BY RUTH COXETER

GETTING A CLEARER PICTURE OF BREAST-CANCER CELLS

A method for tracking enemy planes may soon track a new enemy: breast-cancer cells. Starting in the 1970s, Bernard D. Steinberg, an electrical engineer at the University of Pennsylvania, developed mathematical techniques for the military to transform blips on a radar screen into sharp images of airplanes. Now, he hopes to apply the system to ultrasound images for early detection of breast cancer.

Today's X-ray mammograms have good resolution of shapes, but don't distinguish well between the darks and lights of benign and malignant tissues. Ultrasound, which uses high-frequency sound waves, gives better contrast than X-rays but poorer resolution of shapes. So, Steinberg is working with postdoctoral fellow Qing Zhu and Robert Waag, a professor of electrical engineering at the University of Rochester, on a mathematical recipe, or algorithm, to improve ultrasound's resolution. The goal is to clean up the distortion in the image without wiping out the variations in the ultrasound echo that are intrinsic to different structures in the breast.

A STEP TOWARD LESS MERCURY IN THE ENVIRONMENT

Researchers at Quebec's government-owned electric company, Hydro-Québec, have found a way to avoid using toxic mercury in the production of textile dyes and chemicals for paper production. The researchers say preliminary experiments show the same method could be used to make compounds for synthetic vitamin K, pesticides, perfumes, sunscreen, and plant-growth regulators. This spring, Hydro-Québec licensed the technology to a unit of Taiwan's Taysung Enterprises Co., a dye maker.

According to Stephen Harrison, leader of the Organic Electrosynthesis project at Hydro-Québec's LTEE lab, the keys to the process are electricity and the rare-earth element cerium. An oxidized compound including cerium steals electrons from a naphthalene derivative. The destabilized naphthalene derivative then reacts with water to form a new compound that's a precursor to a wide range of valuable chemicals. The cerium compound returns to an electrochemical cell, where an electrical charge strips it of electrons, allowing the process to start over again. Harrison says the process became feasible with the development of highly efficient electrochemical cells.

VIRTUAL REALITY COULD MEAN REAL EYE TROUBLE

Parents have always worried about Junior ruining his eyesight by playing too many video games. But with the advent of virtual reality, those fears may have added justification. A recent study at Waseda University in Tokyo suggests that prolonged exposure to stereoscopic visual effects, typical of virtual reality systems, can temporarily impair the eye's ability to focus on real objects.

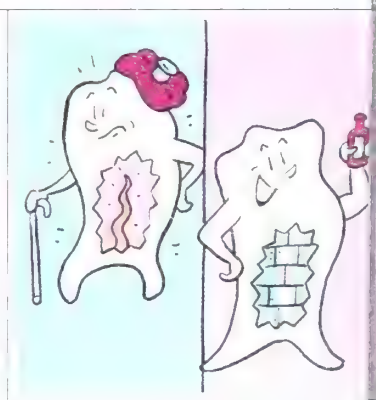
Waseda professor and virtual reality expert Kageyu Noro enlisted four student volunteers to watch a video of a can rotating slowly in space, while wearing special goggles to create the 3-D effect. After an hour of viewing, the tape was turned off, and the students were asked to focus on two points in succession—the first one 40 inches away, and the second 10 inches away. It took the students an average of 1.7 seconds to refocus, more than double the usual time, Noro says. Controls tests using ordinary, two-dimensional computer screens produced no such aberrations. Although Noro tested goggles with rapidly flickering shutters that allow only one eye to see at a time, he believes the effect would be the same with other varieties of 3-D goggles. Although the students' vision quickly returned to normal, Noro favors guidelines limiting the depth and intensity of 3-D images used in game software.

PLASTIC AUTO PARTS THAT WON'T NEED A PRIMER COAT

Increased use of plastics for bumpers, fenders, and other body panels has helped auto makers reduce weight and increase gas mileage. But the "electrostatic" painting systems they use require that painted surfaces be electrically grounded. So, plastic fenders and bumpers must be primed with a conductive paint before they can be sprayed with enamels. That priming adds as much as $7 per bumper or fender.

A tiny Cambridge (Mass.) materials company has a way to charge the plastics without lessening their smoothness and resiliency, as other conductive additives do. It makes tiny carbon-based fibers that can be mixed with resin to produce an electrically conductive plastic. The company, Hyperion Catalysis International, has recently geared up to make the graphite fibers in commercial quantities. It figures that the fibers would add just $2 to the cost of each bumper or fender. Hyperion says that Ford, Honda, General Motors, and Renault are evaluating conductive plastics to replace priming.

A WAY AROUND THE DREADED ROOT CANAL?



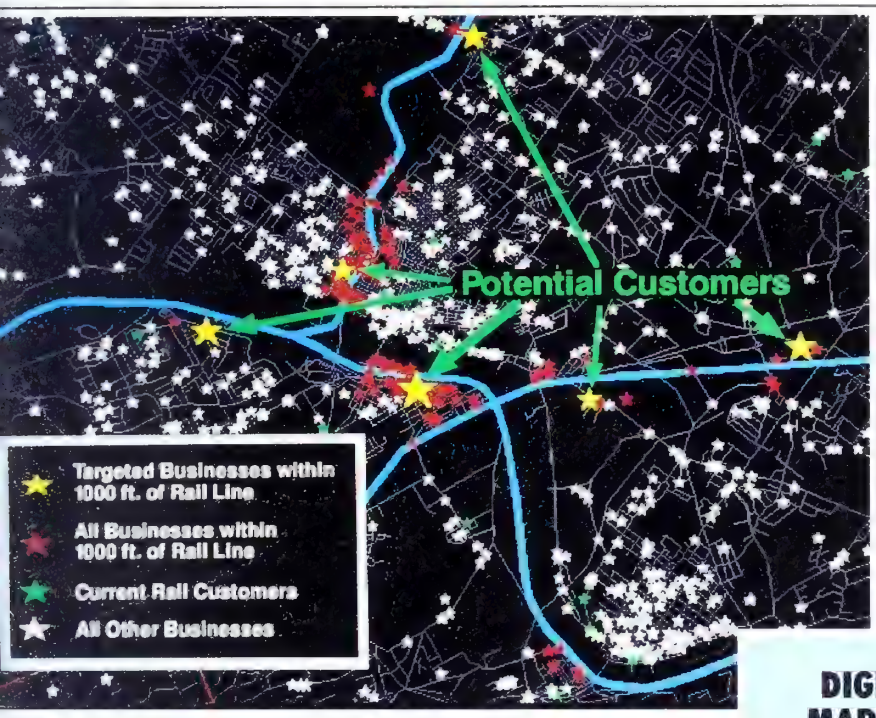
Creative Biomolecules Inc. in Hopkinton, Mass., is testing a way to stave off root-canal operations by regenerating dentin, the tooth's natural guardian. Calcium-rich dentin lies just beneath the tooth's enamel and protects the tooth's nerve and blood supply, the pulp. Dentin decay allows the pulp to become infected. Root canal removes the infected pulp and fills it with a rubbery compound. But that cuts off the blood supply, and the tooth gradually becomes brittle.

Taking a more biological approach, Creative Biomolecules has developed a dentin-regeneration product based on OP-1, a protein that apparently stimulates uncommitted cells to lay down dentin. This month, the Food & Drug Administration granted approval for human trials. Creative Biomolecules Chairman Charles Cohen says OP-1 may have applications in bone reconstruction and the treatment of osteoporosis.

FTWARE

COMPUTER MAPS POP UP ALL OVER THE MAP

ities, scientists, and marketers are putting them to myriad uses



ONRAIL'S CHARTS HELP PINPOINT LIKELY PROSPECTS FOR FREIGHT SERVICE

A major earthquake rocks Los Angeles. Phones are out; fires rage. In an emergency bunker under ity Hall, engineers enter data about e quake's precise location and magnide into a computerized mapping sysem of the city. Almost instantly, the rogram updates the map, color-coding e fault lines and variations in soil ypes and distinguishing thousands of uildings, bridges, and roads by the ethods and materials used to build em. Engineers zoom in on the hardestit spots, as the computer directs emerency crews along unobstructed routes.

Science fiction? In fact, Los Angeles lans to spend $30 million over the next ve years on so-called geographic inforation systems (GIS) to help manage e earthquake threat and other urban roblems. By combining digital maps ith data bases, these systems can uickly generate graphic displays of verything from traffic patterns to the pread of disease. As cheaper, more owerful systems appear, sales of GIS ardware, software, and services may reach $4 billion worldwide by 1995, up from $2 billion in 1992, says John C. Antenucci, president of GIS consultant PlanGraphics Inc. in Frankfort, Ky.

Indeed, computer mapping technology is moving well beyond its traditional uses of helping utilities and government agencies keep track of power lines and natural resources. By combining data on demographics and traffic patterns, PepsiCo Inc. uses GIS to help pinpoint the best locations for new Pizza Hut and Taco Bell outlets. Federal Express Corp. uses it to place its drop boxes and estimate the number of trucks and planes it needs during peak periods. And many other companies are finding that a $15,000 investment in desktop GIS can do the number-crunching and tedious plotting work that once burdened teams of market researchers.

Meanwhile, the scientific community is also putting GIS to work. By feeding reams of data into such systems, scientists can visually analyze everything from encroaching deserts in Africa to the effects of acid rain in Europe. And doctors use the technology to correlate the incidence of cancer with pollution and other factors. "This isn't just about making maps, it's about building models of the way reality is," says Jack Dangermond, president of Environmental Systems Research Institute (ESRI), a GIS-software company in Redlands, Calif.

For Conrail, reality means keeping tabs on 20,000 miles of railroad track and thousands of parcels of adjoining real estate in 14 states in the Northeast. The company pours data from special track-monitoring cars into a GIS that creates a color-coded map that alerts engineers when tracks need work. Conrail also uses GIS to hunt new customers by matching its rail lines with a computer-generated map of nearby businesses.

TUNNEL VISION. Government contracts, however, still account for about 60% of America's GIS market. Recently, the Bureau of Land Management and the U. S. Geological Survey awarded contracts worth $450 million to convert paper topological maps to digital. And if President Clinton makes good on even part of his promise to pour $80 billion into rebuilding the infrastructure, GIS companies stand to gain. That's because government agencies find they can cut costs and construction time by using GIS for public-works projects.

Nowhere is that clearer than in Boston, where Uncle Sam is funding most of a $6 billion project to replace an elevated highway with a tunnel beneath the city. Starting with old paper maps and satellite surveys, engineers spent 18 months creating a $3 million digital map that includes every street, building, pipe, and cable in the area. The tunnel burrows close to building foundations, gas lines, and even cemeteries. To relocate the maze of ancient utility pipes, engineers from Bechtel Corp. and Parsons-Brinckerhoff Inc. reroute pipes on their computer map, then print out work orders to construction crews. "It takes five minutes, instead of days [doing it] the old way," says Boris Tsirulnik, a utilities engineer on the project.

Engineers working on the Boston tun-

DIGITAL MAPPING

Market leaders for geographical information systems software include:

1992 software sales	
ENVIRONMENTAL SYSTEMS RESEARCH INSTITUTE	
Redlands, Calif.	$108 million
INTERGRAPH	
Huntsville, Ala.	$96 million
EDS/GDS	
St. Louis	$20 million
STRATEGIC MAPPING	
Santa Clara, Calif.	$17 million

DATA DARATECH INC.

nel created their digital map from scratch. But others are launching geographic information systems with off-the-shelf maps and software. These maps are based on the Census Bureau's first national digital map, which contains every street in the country. But because it is accurate only to within 200 feet and is dotted with errors, a small industry has sprung up to fine-tune it. Companies such as Etak in Menlo Park, Calif., have workers driving along the byways of America, jotting down the precise location of intersections, traffic signs, and buildings.

Some communities have linked GIS with communications gear. At the emergency center in Pinellas County, Fla., dispatchers can see a caller's location on a wall-size digital map, along with the location of the county's ambulances. An electronic map in the vehicle guides its driver and provides the caller's name and the type of emergency.

IN THE VANGUARD. Geospan Corp. in Minneapolis is betting that communities and businesses will want even more detail. The company is deploying vans that are linked to satellite positioning systems and equipped with 10 video cameras each. The idea: to record images of every city street in the U. S., store them on compact disks, and link them to digital maps. Press a button, and up pops a video or digital record of the road with utility lines, traffic signs, and buildings. Geospan plans to update the record every year.

The tools to transform reams of data into brightly colored, easy-to-interpret digital maps come from specialized software suppliers, such as Intergraph Corp. in Huntsville, Ala., and Risk Management Software Inc. in Mountain View, Calif. Since 1987, the market leader, ESRI, has seen its sales grow 30% a year, to $120 million last year. Its ARC/INFO software system will transform raw data on a river's water quality, for instance, into a color-coded map displaying the pattern of pollution.

GIS technology is also moving into new consumer markets. Software from Automap Inc. in Phoenix lets travelers pick the fastest route between two cities, plot it on an electronic map, and estimate driving time. And computerized charts from Trimble Navigation Ltd. in Sunnyvale, Calif., linked to satellites, will tell boaters their precise location, shown by a boat-shaped cursor on the chart.

Digital maps aren't actually going to solve urban problems, of course. And they certainly won't make earthquakes go away. Still, electronic mapping systems may someday be as familiar as blueprints and dog-eared paper maps.

By Eric Schine in Los Angeles, with Geoffrey Smith in Boston

CHALLENGING THE KING OF CHIPS

Together, IBM, Motorola, and Apple are taking on Intel's Pentium

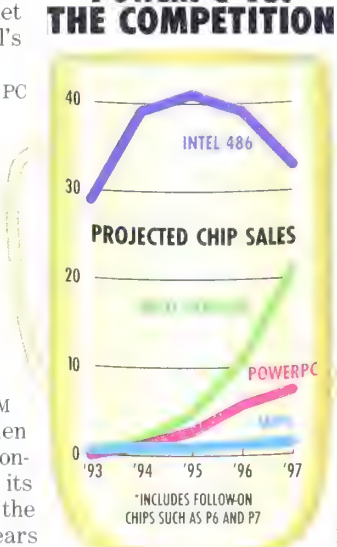
Ever since IBM crowned Intel Corp. the heavyweight champ of the personal-computer microprocessor market by giving it the contract for its first PC in 1981, the chipmaker has had little problem disposing of challengers. Motorola, Sun Microsystems, Digital Equipment, and others have at various times introduced chips that were faster or more powerful, but all lacked the market strength to dent Intel's monopoly.

Now there's a new PC chip in town, and it's backed by none other than IBM. The chip, called PowerPC, is the product of Big Blue's 1991 partnership with Motorola Inc. and Apple Computer Inc. The PowerPC is out to take back some of the hugely profitable microprocessor business that IBM bequeathed to Intel when it handed over the responsibility for the heart of its industry-standard PC to the chipmaker a dozen years ago. The three partners have already invested more than $1 billion in their challenger, which was designed jointly by IBM and Motorola in Austin, Tex., at what is probably the world's largest chip-design center.

SMALLER AND CHEAPER. The PowerPC uses an advanced chip technology called RISC—reduced instruction-set computing—to roughly equal the performance of Intel's new Pentium chip. But it is cheaper to make, in part because it is only half the size—more chips can be stamped out of the same silicon wafer. That has allowed Motorola, which is the first of the partners to sell the chip on the open market, to price the initial PowerPC model at $450, vs. $975 for the Pentium. That chip, the model 601, began shipping in June. When three more powerful members of the family are unveiled next year, their technical lead over Pentium could be even greater.

The PowerPC has more than technology on its side. Apple Computer has said it will convert its Macintosh line of personal computers from Motorola's 68000 series to the PowerPC over the next two years, starting with 1 million units in 1994. When combined with PowerPC-based computers from IBM and other computer makers, the new chip could capture up to a third of the PC microprocessor business in five years, up from the 13% share now held by Motorola-based Macs.

POWERPC VS. THE COMPETITION



DATA: DATAQUEST CORP.

NIGHTMARES. All these plans, however, could easily come to naught as have so many other challenges to Intel's dominance. Digital Equipment Corp.'s Alpha chip—significantly faster than the Pentium—is struggling to find takers among big-name PC makers since it was introduced last year with great fanfare. And the powerful R4400 chip made by Silicon Graphics Inc. subsidiary MIPS Technologies Inc., which started shipping in January, so far lacks the resources and big-company support to take on Intel. "Every one of these chips has a nightmare scenario," says J. Thomas West, senior vice-president for advanced development at Data General Corp., which has not yet placed a bet on an advanced chip. "It's not clear to us that any one of these has a shot at being the winner."

The obstacles are daunting for the PowerPC, as well. Although the PowerPC looks like a winner to Merrill Lynch analyst Daniel Mandresh, "the overriding issue is lack of software compatibility." There are reports that Motorola

ıpting Microsoft Corp.'s soon-to-be-re-
sed NT software for the PowerPC—
torola won't comment—and the chips
n't be able to run the DOS and Win-
ws operating systems until at least
xt year, when IBM and Sun Micro-
stems Inc. are scheduled to unveil
werPC versions of their OS/2 and Sol-
s operating systems, respectively.
d even that is done through a techni-
trick called emulation, which slows
vn the operation of the software. Of
ırse, the PowerPC will run software
Apple's computers—its software de-
opers are already adapting their
res to the new chip—and for IBM's
e of engineering workstations, which
based on the Unix oper-
ng system favored by
hies.

ɔc powerhouse Microsoft
elf is holding back sup-
ɔt until the PowerPC
ɔves that it is more than
t Apple's new proprie-
y system. "I don't think
hreatens Intel any more
n the 68000 threatened
el," says Carl Stork, Mi-
ɔsoft's director of Win-
ws Platform Definition.
n not trying to cast
nes at PowerPC, but it's
tainly not a slam-dunk
lay."

Microsoft's skepticism is
najor problem, since the
tware powerhouse could
the difference between
ccess and failure for the
w chip. If NT runs on the
werPC, the chip could
ab an estimated 9.5%
are of the overall micro-
ɔcessor market by 1995
d about 12% by 1997, says
taquest Inc. analyst Ken Lowe—
ıghly a $1.5 billion business. But with-
NT, says Dell Computer Corp. chief
chnical officer G. Glenn Henry, "it's
t worth listening to them."

AITING GAME. PC makers are barely
tening so far. Motorola, which has
en on an all-out sales crusade in re-
nt months, claims that a handful are
ietly designing PowerPC-based sys-
ns. But most PC makers would rather
t risk the wrath of Intel for a chip
ıose future is unclear. Cash-strapped
ppliers of the peripheral chips that
rk with the microprocessor are also
iting for clearer evidence of demand.
The chip does have guaranteed mar-
ts in Apple and IBM. IBM is committed
using the PowerPC as the brains for
erything from palmtops to supercom-
ters, starting later this year with a
rtable workstation designed by Tad-
le Technology Inc. in Cambridge, Eng-
ıd. And on July 1, IBM announced a

Power Personal Systems Div. Its mandate: Sell PowerPC-based systems even if it means cannibalizing sales of IBM's Intel-based systems. But that could cause problems. Management consultant Charles Ferguson, who co-wrote the recent book *Computer Wars: How the West Can Win in a Post-IBM World*, says internal politics is holding up efforts to replace mainframes and minicomputers, IBM's longtime cash cows, with PowerPC-based systems.

CARS AND VIDEOS. Motorola can ill afford any wavering from its partners. The PowerPC is its best and last chance to challenge Intel—and a means to redeem itself for its unsuccessful attempt to launch its own RISC chip a few years ago. "There's no backup plan," says PowerPC Marketing Director Phil Pompa. "We're on the rock face, and there's only one way to go—and that's up."

To help it reach the top, Motorola has launched what Pompa says will be the company's biggest chip-marketing campaign ever. Starting with a 12-page pullout section in *The Wall Street Journal* in June, the chipmaker launched a series of bold ads—one of them claims that PowerPC "has the power to blow away Pentium"—to notify software developers and potential customers of its latest option. The company's sales and marketing staff, which will triple to 90 people by next year, is also pulling out all the stops.

Already, PowerPC has found customers beyond Apple and IBM. Groupe Bull, for one, plans to build high-end computers around the chips, and its Zenith Data Systems subsidiary could follow suit with personal computers. And there may be big opportunities for the PowerPC beyond the computer market, too. Scientific-Atlanta Inc. is planning to make a cable-television box for interactive TV viewing with the chip, and Ford Motor Co. has announced that it will use the chips for engine control and other functions in its new cars. Motorola plans to have at least one stripped-down PowerPC, at an average selling price of less than $20, in every Ford car by the year 2000.

Intel, however, still owns the game board, and it's not yet playing. The company has not even lowered the Pentium's price since the PowerPC was introduced—and drastic price cuts have been one of the chip giant's most effective weapons against competitors such as Advanced Micro Devices Inc. in the past. "We'll just go ahead and ship a couple million Pentiums before they even get started," boasts Intel Senior Vice-President Paul S. Otellini. Such smugness may not sit well with the chipmaker's customers. "Intel better watch their pricing, or they're going to open the door" to competition from other platforms, asserts Gregory E. Herrick, chairman of PC maker Zeos International Ltd.

And once inside, the powerful PowerPC triumvirate may not be so easy for Intel to dismiss.

By Peter Burrows in Austin, Tex., with Gary McWilliams in Boston, Robert D. Hof in San Francisco, and bureau reports

Motorola's Pompa: "There's no backup plan"

ALL VAN OVERBEEK

COMPUTERS

AT IBM, MORE OF THE SAME —ONLY BETTER?

In sales and strategy, Louis Gerstner is following John Akers' path

When Louis V. Gerstner Jr. took over as chief executive officer of International Business Machines Corp. three months ago, speculation was flying that he would make dramatic changes fast. After all, his predecessor, John F. Akers, was widely branded a failure for not moving far enough quickly enough to overhaul the giant's bloated organization. But three months into the job, Gerstner has made it clear that he has no intention of reconstructing IBM. Instead, the man everyone saw as the Great Changemeister is determined, for the moment, to carry out a set of policies put in place by none other than the much-maligned Akers.

The most significant statement of direction to come out of Gerstner's office since he took over on Apr. 1 was a memo to his top executives dated July 2. In it, Gerstner says IBM will keep doing what it had been doing under Akers, only more efficiently: "I do not want to undertake a major reorganization of IBM at this time." The company should focus on customers, markets, and competitors over the next 12 to 18 months, he says, rather than on internal changes. But he also believes IBM has yet to test fully many of the changes Akers put in place. "I want to make sure the current system is implemented well before we try alternatives," the memo says.

MARKETING MAN. The system Gerstner is most focused on is also the one that most closely affects the customer—IBM's huge sales force, 40,000 strong in the U. S. They were once considered IBM's biggest asset, the famous "Blue Suits" who led customers toward new technologies, from electric typewriters right through to personal computers. But in recent years, as the products and the company have become increasingly complex, the sales force has had more and more difficulty in explaining it all to the customer.

Gerstner, the former CEO of RJR Nabisco Inc., is a marketing man by background, and to him attention to the customer has always been the key to success. And customers—like IBM's 200 largest, whom Gerstner met with in Chantilly, Va., this May—are telling him they would be most satisfied if they can get what they've always had from Big Blue: one salesperson, what IBMers call a "single face," to call for the lowdown on the whole breadth of IBM's products and services, from mainframes to portables.

Akers was a big advocate of the single face. That's why, when he divided the company in late 1991 into 13 lines of business based on product type, the sales force was kept as a separate monolith, organized along geographic lines. Akers did put in motion one change several years ago: the development of product and industry specialists within each sales group. These specialists, known inside IBM as "fighter pilots," work with a sales team that specifically targets, say, the banking industry. They were first launched in Europe, with the U. S. following suit last year.

Gerstner wants more pilots, and he wants the manufacturing and product development staffers in the 13 lines of business to become more heavily involved in developing their skills and even determining compensation.

That should help the sales force play another of IBM's longtime, long-appreciated roles: computer adviser to the customer. "IBM helped American business learn the mainframe model in the '50s and '60s," says Dennis H. Jones, chief information officer for Federal Express Corp. "Now they should be putting as much focus on helping make the transition" to new technologies.

NO RUSH. IBM must also do a better job of turning new technologies into products customers want to buy. Akers' reorganization of the company by business lines went some way toward that end by cutting away layers of bureaucracy, allowing the units to react more quickly to market changes—witness the success of the IBM PC Co. this year. The fighter pilot system might help, too, says Gary M. Stibel, a principal of New England Consulting Group in Westport, Conn. "Just as these information specialists can help customers solve their problems better, they can also feed better data back to headquarters about what the customer wants."

Still, having information and acting on it are two different things, and Gerstner has yet to indicate how he will get IBM's lumbering product development and manufacturing infrastructure to move more efficiently (table). As of today, he hasn't even begun to formulate a new long-term plan. "Lou is not rushing to make significant changes in vision," says Gerald M. Czarnecki, IBM's newly arrived head of human resources.

He is, however, still following through on Akers' two-year-old restructuring. Analysts estimate that at least 50,000 IBMers grabbed a voluntary buyout offer that expired on June 30—more than twice as many as the company anticipated. That could mean a charge of about $2 billion when second-quarter earnings

CAN THE CEO GET THE GIANT TO SERVE THE MARKET FASTER?

GERSTNER MOVES IN

DIRECTIVES Told shareholders he won't break apart IBM, said he won't reorganize sales force

ORIENTATION Visited IBM sites in the U.S., Europe, and Japan; plans to spend August visiting research facilities

NEW APPOINTMENTS Brought in Chrysler's Jerome B. York as CFO, former Bank of America-Hawaii CEO Gerald M. Czarnecki as human resources director, and made IBM insider M. Bernard Puckett chief strategist

DATA: BUSINESS WEEK

e announced on July 27—on top of the 00 million quarterly loss analysts were eady expecting.

There could be more to come. IBM's maining work force of 250,000 may ed to be cut by an additional 25,000 to 000, some analysts estimate. The comny refuses to comment on whether it ll institute any further layoffs, but rstner has asked the heads of all IBM's sinesses to detail the resources they ed to operate profitably.

Gerstner may have signaled his desire make big staffing cuts with at least o of the executives he has hired for inner circle. Both Czarnecki, former-CEO of Bank of America-Hawaii, and new chief financial officer, Jerome York, once CFO of Chrysler Corp., are l hands at corporate restructuring.

But some industry eyebrows were sed at Gerstner's choice of career IBM-M. Bernard Puckett for the newly eated position of director of corporate ategy. As an IBM strategist in the 30s, Puckett helped put in place the ltibillion-dollar expansion of producn that is now being dismantled. "He is sely associated with the mistakes of e past," says Robert Djurdjevic, presnt of consulting firm Annex Research Phoenix.

NDAY PHONE CALLS. In general, hower, Gerstner wins far more praise than ocks from customers and analysts for methodical start. "I don't think he's ving too slowly," says Jay Stevens, alyst with Dean Witter Reynolds Inc. 's an extraordinarily complex multinanal company. I think he's going quickunder the circumstances."

He's certainly traveling quickly. Gerst- has spent more than half his time iting IBM sites and the rest talking employees, customers, and competi-'s. He has traveled to 25 facilities in rth America, spent a week in Europe d another in Japan, met with the ads of IBM's Latin American operans, and canceled his traditional twoek vacation in August to tour rerch facilities. He regularly meets with oups of up to 100 employees and gets out 25 electronic-mail suggestions a from staffers at all levels. These passed on to IBM executives—with handwritten notes attached.

Weekends offer no respite. IBM Ditor of Communications David B. Kalwho came with Gerstner from RJR ynolds, says the boss typically takes ee briefcases full of work home every ekend. "And I know he reads it," says lis, "because we all get phone calls m him Sunday afternoon."

Gerstner may not be planning great nges, but he's certainly working hard something. That could mean a lot re memos in the next few months.

By Catherine Arnst in New York

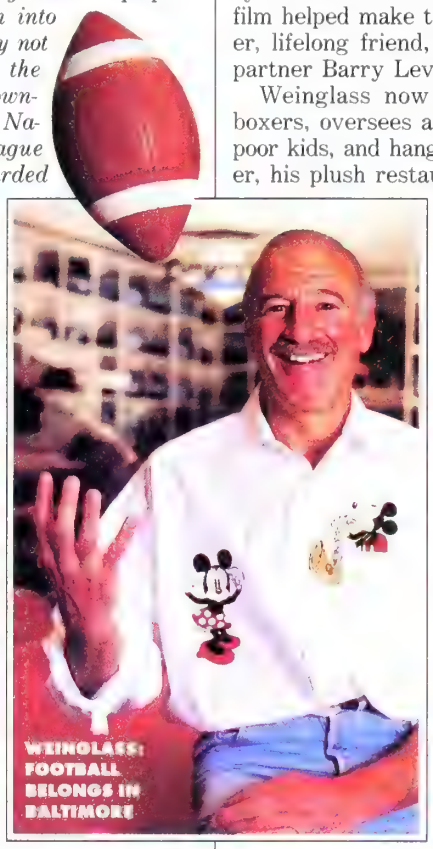
Sports Business

FOOTBALL

THE TITLE THEY WANT IS 'OWNER'

A look at the hopefuls vying for two new NFL franchises

Why would an aging rebel, an ultra-wealthy investor, a chain-restaurant magnate, and a member of the nation's most famous brewing family want to plop as much as $200 million into new ventures that may not make a dime until the 21st century? To be owners of the first new National Football League franchises to be awarded in 19 years. The NFL plans to choose which two cities and ownership groups will win the prizes in the fall. Here's a look at the owner wannabes at the three top contenders: Baltimore, Charlotte, N. C., and St. Louis.



WEINGLASS: FOOTBALL BELONGS IN BALTIMORE

JEFFREY AARONSON/NETWORK ASPEN

George Young, the New York Giants general manager, hadn't seen Leonard "Boogie" Weinglass in more than 30 years. The Boogie he knew was a troublesome Baltimore teenager who had been expelled from one school and who, despite athletic promise, was barely improving at the high school where Young coached football. Young recalls collaring young Weinglass selling chances in football pools outside a packed gym.

But when Young saw Weinglass at an NFL meeting in Phoenix last year, the Giants' GM was nothing but gracious. Weinglass is now a multimillionaire living in Aspen, Colo., on income from his 1,435-store retailing chain, Maryland-based Merry-Go-Round Enterprises Inc., which sprang from an Atlanta hippie boutique in the 1960s. He's leading investors who would bring NFL football back to Baltimore, a city whose heart broke when Robert Irsay shipped his Colts to Indianapolis one April night in 1984.

Weinglass would add flamboyance to the league. Still sporting a ponytail (gray now that he's 51), he was the model for the rakish Boogie played by Mickey Rourke in the 1982 movie *Diner*. The film helped make the career of filmmaker, lifelong friend, and NFL investment partner Barry Levinson.

Weinglass now backs aspiring pro boxers, oversees a foundation that aids poor kids, and hangs out at Boogies Diner, his plush restaurant/clothes shop in Aspen. Chairman of Merry-Go-Round, he leaves the daily work to CEO Michael D. Sullivan, another partner in the Baltimore effort. Weinglass would own a half-interest in the football team.

But he has a rival: Malcolm Glazer, a 65-year-old investor from Palm Beach, Fla., whose holdings range from shopping centers in 20 states to an oil-services outfit founded by former President George Bush to a stake in the parent of Houlihan's restaurants.

Glazer's NFL partners would be his kids. Two sons, who live in Baltimore, would play key roles, and Glazer believes this will help his cause. "We are what the NFL is looking for," he says, "a single-family ownership" that can meet a team's financial needs. Indeed, his family owns or controls $1 billion in assets. "We can write the check, and there's not another group that has a family that can," he says.

For Jerome J. Richardson, who's trying to put Charlotte on the NFL map, becoming an owner would bring him full circle: Richardson helped the Baltimore Colts win the 1959 NFL title by catching a touchdown pass from Johnny Unitas. But he soon quit to build a fast-food stand in Spartanburg, S. C. That outlet

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eventually grew into Flagstar Cos., the nation's fourth-largest food-service company and owner of the Denny's chain.

Richardson, 56, recently took bold steps to defuse a ruinous crisis at Denny's. Charges of racial bias have been leveled by many blacks, including six Secret Service agents who are now suing. In response, Richardson signed a contract with the National Association for the Advancement of Colored People calling for random tests of restaurants and more minority managers. But it's too early to say the Denny's crisis has passed.

For the NFL franchise, Richardson has mustered strong community support. All 102 luxury skyboxes in a proposed stadium sold out within a week after bidding opened on July 1—at prices from $40,000 to $240,000 a year. Also, in a unique financing twist, fans have already ponied up cash for more than 41,000 so-called Permanent Seat Licenses, which give them the right to buy season tickets annually, at from $600 to $5,400.

Even as the estimated entry fee for a new franchise soared to the current $200 million, Richardson believes that the venture is a civic trust. Why? He's convinced the Carolinas should be considered a major-league area.

James Busch Orthwein's biggest edge in his bid to bring the NFL back to St. Louis may be his middle name. As one of the largest shareholders in and a director of Anheuser-Busch Cos., he's deeply involved in one of professional sports' biggest advertisers. What's more, his town offers the NFL a promising TV market and is building a $258 million domed stadium. St. Louis is "a virtual lock," according to Fred Edelstein, editor of the *Edelstein Pro Football Letter*.

In fact, Orthwein, 69, already roam the NFL's suites. He spared the leagu major embarrassment last year by takin control of the struggling New Englan Patriots from Victor Kiam, the financiall ailing former owner. However, to com ply with a league rule against multipl ownership, Orthwein would have to se the Pats, and he's laying plans to do so

The St. Louis group boasts the bes NFL cachet in the expansion derby: Wa ter Payton, the former Chicago Bear star running back. Orthwein has promise that Payton will represent St. Louis a league meetings. Payton would be th NFL's first black owner (though Weir glass and Richardson also plan on mino ity partners).

Some recent maneuvers show off O thwein's marketing savvy. He redesigne the team logo and moved the Patriot from last to fifth in sales of NFL-license goods. Fans cheered when he hired B Parcells as head coach, a two-time S per Bowl winner with the New York G ants. Orthwein comes by his marketin sense honestly: For years he ran the a agency now known as D'Arcy Masi Benton & Bowles Inc.

Two other cities, Jacksonville, Fla., ar Memphis, also remain in the hunt. Whi market size makes them long shots, ea boasts noteworthy NFL wannabes, too. Jacksonville, shoe magnate J. Wayn Weaver has teamed with Jeb Bush, th former President's son. And in Memph the owners would include cotton ki William B. Dunavant Jr. Considering th stakes, this battle is sure to go down the last seconds on the game clock.

By Joseph Weber in Philadelphia, wi Chuck Hawkins in Charlotte, N.C., G DeGeorge in Miami, and David Greisi in Chicago

THE NFL'S WANNABES

The battle for two NFL expansion franchises, to be decided this fall, has narrowed to a handful of would-be owners. Here are the three leaders:

ST. LOUIS James Busch Orthwein: A major shareholder and a director of Anheuser-Busch, he'll have to sell his interest in the New England Patriots.

CHARLOTTE Jerome Richardson: CEO of Flagstar, parent of the Denny's chain and a major Hardee's franchisee, he was a receiver with the 1959 champion Baltimore Colts.

BALTIMORE Leonard "Boogie" Weinglass: Founder of the Merry-Go-Round chain of clothing stores, he's vying with Malcolm Glazer, a Florida-based developer.

DATA: BUSINESS WEEK

AILING

ESPRESSO, SANDWICHES, AND A SEA OF BOOKS

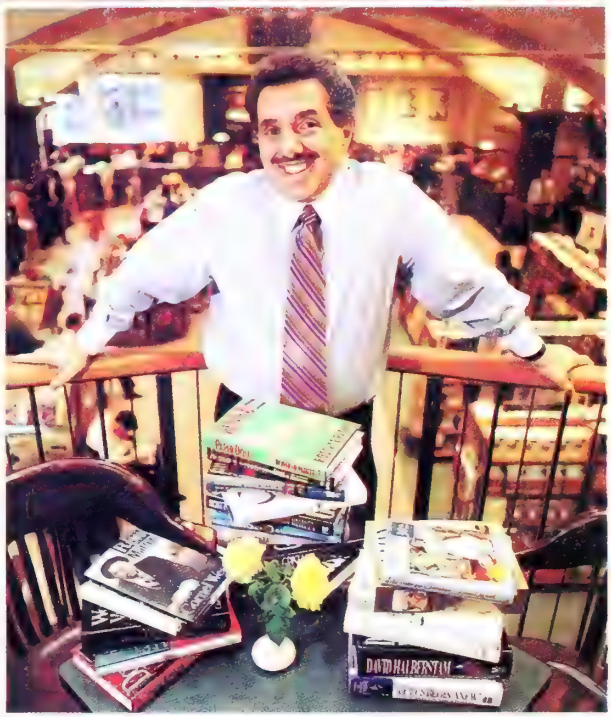
arnes & Noble superstores draw crowds and critics

t's 11 p.m., and the Barnes & Noble bookstore on Manhattan's Upper West Side is packed. Browsers are ronged around the selling floor and rawled on window seats. Upstairs, in e cafe, people munch sandwiches and espresso while listening to a sympho- . Kids wander into a minitheater to atch a puppet show. Kathleen Con- rs, a local resident, can't believe it. aturday night, and all these folks want hang out here," she marvels.

Welcome to the world of Barnes & ble superstores, the fastest-growing end in book retailing. While many re- lers are still riding out the effects of e recession, Barnes & Noble, best own for its 10% to 40% discounts, has cided that bigger is better—stores th 20,000 to 40,000 square feet and 0,000 titles, plus food and entertain- ent. In addition to setting up 75 super- ores a year for the next three years, e company plans to expand its chil- en's book, software, and college text- ok businesses. "We are clearly posi- oned, right across the board, to exploit the media forms," says Leonard Rig- o, chief executive and half-owner, with atch retailer Vendex International, of ivately held Barnes & Noble Inc.

ERCE FIGHT. So far, Riggio's fast-growth rategy is working. Superstore sales se 114%, to $328.8 million, in the fiscal ar ended Jan. 30. Total sales for the okstore company jumped to $1.09 bil- n from $921 million the year be- re. Software Etc. Stores Inc., the all-based retailer of home-computer cessories that is 27% personally vned by Riggio, grossed an ad- tional $203 million in 1992, a 0% increase from 1990.

But some bookworms think ggio may be overestimating his ture market. Although the nount Americans spent on oks grew 12.5% last year, ac- rding to the Commerce Dept., e growth is likely to slow to 3% this year and a scant 3.5% 1994, figures Cahner's Econom- s, which tracks the industry. ooksellers contend the business likely to become a fierce battle for market share. "Open- ing up new car dealer- ships doesn't mean De- troit will sell more cars," says Bill Kurland, owner of Shakespeare & Co. Booksellers. For now, the superstores are taking sales away from indepen- dents such as Kurland, whose Manhattan store is a block away from the new superstore. But they may also end up canni- balizing sales at B&N's 800 existing mall stores, notes retail consultant Kurt Barnard.



RIGGIO: EXPANDING THE MARKET—OR JUST HOGGING IT?

Riggio firmly believes there is ample room for growth in the market. But just in case, he is nurturing his other divi- sions, too. With juvenile-book sales mushrooming, Riggio is adding more square footage to the Barnes & Noble Jr. stores that form part of the super- stores. Already, children's books con- tribute 15% of superstore sales.

Riggio also continues to expand into textbooks—by far the most profitable part of his empire because of large oper- ating margins in a captive market. Barnes & Noble runs 285 college book- stores, up from 239 a year ago, on such hallowed campuses as Columbia and Northwestern. Two weeks ago, it signed up Pennsylvania State University.

For Software Etc., Riggio is experi- menting with new formats and products. This fall, the 290-store chain will begin setting up nonmall shops adjacent to B&N superstores: up to 70 in each of the next two fiscal years. Software Etc. is forging into multimedia, too. It already sells the Philips CDI Play- er, which plays interactive CD-ROM disks, and is in discussions with Panasonic and 3DO to sell their multimedia machines.

NEW NICHES. Still, books are Riggio's first love. B&N has grown from 23 super- stores in 1989 to 160 in 1993. The newer stores include ample seating room and cafes that serve Barnes & Noble coffee. Now, with corporate debt down to 48% of capital from over 80% in 1992, Riggio plans to boost the number of in-house ti- tles B&N publishes—on such diverse top- ics as art history, fiction, and science—to 300 books this year from 200 in 1992.

B&N's rivals aren't dozing, of course. Kmart Corp.'s Waldenbooks Inc., the No. 1 U. S. bookseller, with 1,275 stores, will expand its mall stores from 3,000 sq. ft. to 6,000 to 8,000 sq. ft. Borders Inc., another Kmart division, will add 12 superstores in the next six months to its existing 33.

Meanwhile, smaller stores are moving into specialty niches, such as ethnic fiction, business books, and women's titles. They're bet- ting that real readers don't want bagels and Beethoven with their books. But if the crowd on the Upper West Side is a barometer, Riggio may have the last word.

By Sunita Wadekar Bhargava in New York

BARNES & NOBLE'S EMPIRE

	REVENUES*
BARNES & NOBLE Superstores, mall stores, and catalogs	$1.09 BILLION
BARNES & NOBLE COLLEGE BOOKSTORES Operates 285 campus bookstores	$500 MILLION
SOFTWARE ETC. STORES Mall-based home-computing retailer	$203 MILLION
MBS TEXTBOOK EXCHANGE Wholesaler of used college textbooks	$90 MILLION

*FISCAL YEAR ENDED JAN. 30, 1993

DATA: COMPANY REPORTS

[LARRY, MOE & CURLY]

[RHYTHM & BLUES]

[MICROSOFT EXCEL, WORD, POWERPOINT & MAIL]

[ROY & TRIGGER]

[BACON, LETTUCE & TOMATO]

[FRED & ETHEL]

[WILBUR & ORVILLE]

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AIRLINES

NORTHWEST'S SIGH OF RELIEF HAS RIVALS GROANING

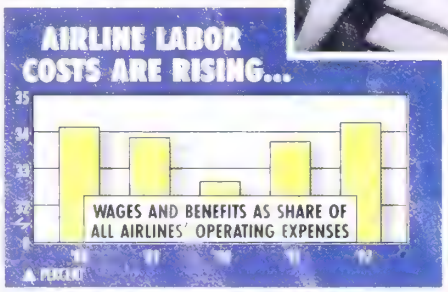
Larger airlines may be hard-pressed to match its pay standard

When Northwest Airlines Inc. wrested cutbacks of up to 15% from its pilots and machinists in early July, the ailing carrier did more than avoid a trip to bankruptcy court. The lucrative package also steps up the pressure on the industry's Big Three—United, Delta, and American—to slash their own swollen expenses. Either that, or watch lower-cost foes such as Southwest, Continental, and now Northwest sail past.

The result is likely to be an outburst of strife as the largest airlines struggle to match Northwest's new labor-cost standard. Wages and benefits consumed some 34% of industry operating expenses in 1992, up nearly two percentage points in two years, according to Transportation Dept. data (charts). And low-cost carriers such as Southwest Airlines Co. enjoy unit costs up to 25% lower than the Big Three, according to Morgan Stanley & Co. analyst Kevin Murphy. Add in the likelihood that the industry won't see any profits for the fourth straight year, and the outlook for clashes grows stronger. "We can't have losses like this and continue to run the business," warns John C. Pope, president of UAL Corp., which owns United Airlines Inc.

While airline labor leaders recognize the Big Three's woes, they disagree on the solution. Some say they would consider pay cuts or work-rule changes, but only for quid pro quos like those Northwest coughed up: three board seats plus up to 37.5% of the company's equity to be split among the carrier's six labor groups. However, United and other carriers, which worry about such issues as diluting shareholder equity, are sure to play hardball. "If I got $1 billion in concessions for $100 million in equity, I'd consider it," says Pope.

UNITED PILOTS: CONSIDERING A 5% CUT IN PAY



Still, the airlines have had little luck so far simply persuading their unions to accept cutbacks. Take United. Earlier this year, Chief Executive Stephen M. Wolf cut management salaries 5%, then asked labor to take 5% pay cuts and to increase productivity by 10%. Both the flight attendants and the machinists dismissed the appeal. Only the Air Line Pilots Assn. (ALPA) agreed to consider it. However, ALPA insisted on first examining the airline's books, which it has been doing for several months.

To step up the pressure, United has threatened to spin off money-losing short-haul routes to shareholders. This would allow the new company to hire less expensive, nonunion workers. The new carrier would be profitable, and United could pare its losses, says Pope.

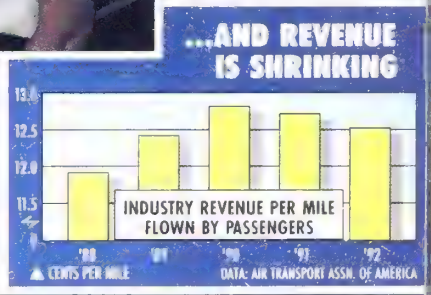
But the idea is likely to hit turbulence. ALPA President J. Randolph Babbit argues that any short-haul company created by United would be effectively controlled by the airline—and ALPA's contract stipulates that any carrier owned or controlled by United must hire union labor. Pope insists that United wouldn't be in control. But last year, America dropped the idea of creating a short-haul carrier after deciding the effort would violate its similar union contracts.

ON NOTICE. Delta Air Lines Inc. and its pilot union haven't reached agreement either. After the carrier imposed a 5% pay cut on nonunion employees, the pilots agreed to cuts for all but the most junior pilots. But Delta refused to accept anything different from its demands. Instead, it reduced its flight schedule and laid off 136 pilots. It plans to furlough 464 more starting in September.

With no carrier rushing to embrace a Northwest-style trade-off, the key question is whether the Big Three can come up with alternatives. American is shrinking and seeking alliances with lower-cost airlines that can fly some of its routes more profitably. It has declined to ask labor for concessions. But at some point, the two sides may conclude "that it's time for us to sit down and talk about doing something differently," says Thomas J. Kiernan, American's human resources senior vice president.

Where does all the maneuvering lead? Back to the bargaining table. Pilots already know what to expect when their contracts expire at the Big Three next year. "They've served us notice that we'll be held up to Northwest next time," says Richard LaVoy, president of the Allied Pilots Assn., which represents American pilots. Maybe so. But unless management finds space for a few new board members, matching Northwest's pay scales may be an elusive goal.

By Kevin Kelly in Chicago, with Wendy Zellner in Dallas and Chuck Hawkins in Atlanta



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THE MINIVAN FREE-FOR-ALL

Two rivals are poised to grab market share from Chrysler

Denver auto dealer Jack Terhar Jr. can hardly wait until early next year to get the snazzy new Ford Windstar minivans into his showroom. Right now, Chrysler Corp. minivans outsell Ford Motor Co.'s aging Aerostars 8 to 1 in Terhar's area. Terhar hopes the roomy, front-wheel-drive Windstar, derived from Ford's best-selling Taurus sedan, will finally put Ford dealers in the running in one of the industry's most profitable market segments. "It's critical to us," says Terhar.

Welcome to the minivan free-for-all. Chrysler has virtually owned the minivan market ever since the company invented it 10 years ago. But two formidable rivals are poised to nab some market share. Ford's Windstar promises to be the most car-like minivan yet. And in 1995, Honda Motor Co.'s first minivan, based on the Accord sedan, is due to arrive. Their entrance has Chrysler girding for a fight. "This could get to be a very nasty competitive battle," predicts Shearson Lehman Brothers Inc. analyst Joseph S. Phillippi.

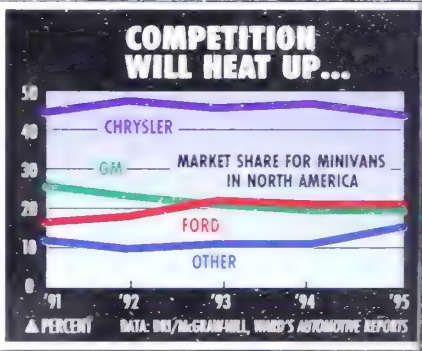
FAT MARGINS. There's good reason for one. Minivans comprise one of the fastest growing markets in the U.S. and Europe. This year, about 1.1 million U.S. consumers will purchase a minivan, and sales should rise to almost 1.3 million annually by 1995, figures Bernard G. Campbell, an analyst with DRI McGraw-Hill. Moreover, with sticker prices ranging from $14,000 to $28,000, the boxy people-haulers carry fat margins: In the U.S., the average gross profit is about $4,000 per vehicle. The strongest U.S. players will also have a leg up on Europe, where the minivan craze is just gathering speed. Analysts expect sales there to jump 230%, to 400,000, by 1996.

Chrysler has dominated the minivan market with a simple formula: no-nonsense utility coupled with car-like handling. In the U.S. this year, it will sell 500,000 minivans—about half the industry's total—on which Chrysler will make more than $2 billion in gross profit.

But Chrysler suddenly looks vulnerable. Its minivans, based on the K-car platform introduced in 1980, are starting to age. In the first six months of this year, Chrysler's market share has slipped two points, to 46.8%. Meanwhile, Ford has begun discounting the Aerostar heavily, and the company's Mercury dealers have a sleek, new, small minivan to offer, the Villager. This has helped Ford increase its market share from 17% to 22%. Ford's gains might be even larger if annual capacity at its factory in Avon Lake, Ohio, weren't limited to a total of 110,000 Villagers and Nissan Quests, the Villager's twin. "We wish we could be building more," says Robert L. Rewey Jr., Ford's vice-president for North American sales.

The Windstar shouldn't have that problem. Ford spent $900 million to retool its Oakville (Ont.) factory to build 275,000 of the new minivans annually. That's important because, unlike the shorter Villager, the Windstar is aimed at the heart of the market—the long-wheelbase minivans now dominated by Chrysler's Grand Caravan. At 201 inches, the Windstar is 10 inches longer than the Grand Caravan, slightly wider, and has a bit more cargo space.

Moreover, Windstar promises to deliver the car-like amenities many minivan buyers crave. As with the Taurus, dual airbags will be standard. The minivan will ride low to the ground, for easier entry and exit. Powered by a 3.8-liter V-6 engine, the new van—unlike the Aerostar—will have front-whe drive, sure-footed in snow. "It has a re stable feel to it," says Terhar, who h driven a Windstar prototype.



AD ATTACK. To launch the new van, Fo plans to pull out all the stops. The co pany will crank up training sessions f its 4,370 Ford dealers, so salespeop will know precisely how Windstar stac up against the competition. Ford's Li coln-Mercury division successfully us the same tactic to prepare its dealers sell its first minivan, the Villager. addition, Rewey promises a "very gressive advertising launch."

Meanwhile, Chrysler is moving qui ly to protect its turf. The company spe millions to redesign its van interiors the 1994 models due in October—a sca three years after a similar redo. I adding a standard passenger airbag a side-door guard beams to meet all fed al passenger-car safety standar though minivans don't have to comp with most of them until 1998. That's boast Windstar won't be able to ma Chrysler also heeded suggestions fr current minivan owners, such as movi

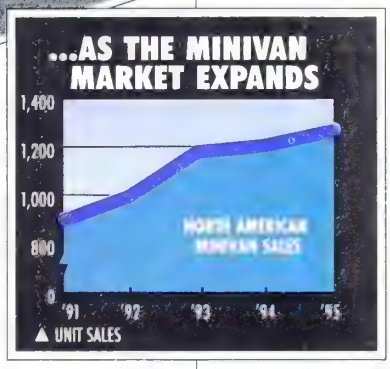
FORD'S 1995 WINDSTAR, SHOWN HERE IN A "SPY" PHOTO TAKEN LAST WINTER, WILL HAVE MORE CAR-LIKE AMENITIES

the radio and heater controls 2.5 inches closer to the driver, and adding a reclining back for built-in child seats.

Chrysler will exploit some potent marketing advantages, too. Its buyers are among the most loyal in the industry. This year, 76% of the people who traded in a Chrysler minivan bought another one. That compares with an industry-wide brand loyalty of about 40%.

Before Windstar arrives, Chrysler will likely launch a direct-mail campaign offering attractive deals on new Chryslers to many of its current 4 million minivan owners. Also, look for a nationwide promotion, a tactic Chrysler used in 1991 just as General Motors Corp. was reaching full production with its new APV minivans. Chrysler trumpeted the first $1,000 rebates on its minivans—and set an all-time monthly sales record of 68,000 minivans in January, 1991, handily blunting sales of the APVs. "I expect Chrysler to do a gigantic minivan sale so there aren't any buyers out there left to buy anything," says Tom Dukes, director of competitive assessment at J.D. Power & Associates Inc., a market researcher based in Agoura, Calif.

AND THE WINGS. That's for the short haul. To handle the long-term threat, Chrysler will start making an all-new minivan in January, 1995, just 11 months after Ford begins producing the Windstar. The new Chrysler van's rounded styling will be much more striking than the company's current boxy versions. But officials promise the new design won't compromise the practicality and car-like features today's buyers like most. And Chrysler will follow suggestions from current owners, such as offering sliding doors on both sides.



About the same time Chrysler's new van hits, Honda will launch its first entry, a hybrid cross between a minivan and a Jeep-like, sport-utility vehicle. It will be based on the same platform as Honda's new Accord, which bows in September. Initially, the company plans to build a modest 70,000 minivans a year. One possible holdup: Executives are still debating whether to build them in Japan or at Honda's plant in Marysville, Ohio.

BOOM DEMAND. These newcomers should help expand the market. Demographic trends also favor strong sales. Baby boomers are the biggest purchasers of the vehicles, and they'll be in their prime minivan-buying-years until at least the end of the decade. According to J.D. Power, the average minivan buyer is 40 years old. The most booming of the baby-boom years was 1957, making those folks 36 now. As their families and incomes grow, they're more likely to buy a minivan. Moreover, the vehicle is becoming popular with retirees, who like its roominess and good driver visibility.

As the competition heats up, Chrysler will likely give up some share of the expanding market, analysts say, even as it fights to keep volume steady. The big loser, however, could be GM. Its plastic-bodied, long-nosed APVs—the Chevrolet Lumina APV, the Pontiac Trans Sport, and the Oldsmobile Silhouette—are the weakest-selling domestic minivans. GM had gambled on futuristic styling to stand out against Chrysler's models, but drivers complained that the radical design hindered forward visibility. That's one reason GM's share plunged four points, to 22%, in the first half of the year. And that was after GM had propped up sales by unloading more than a third of its APVs in low-margin fleet sales, according to *Automotive Fleet* magazine.

GM officials hope a minor nose job that trims the APV's snout for 1994, and the addition of a driver's airbag, will rejuvenate sales. Don't bet on it. "GM's got a bigger problem than that," says Russell M. Darrow Jr., who owns a half dozen car dealerships in Wisconsin, including a Pontiac store that sells GM vans. Without major changes, he says, drivers may still have visibility problems during cornering and parking, for instance. DRI/McGraw-Hill expects GM's share to continue to decline, to 19% in 1995. And an all-new, front-drive van won't arrive until 1996.

Two once popular Japanese minivan models are likely to feel the crunch, as well. Sales of Toyota Motor Corp.'s Previa and Mazda Motor Corp.'s MPV have already skidded drastically because of big price hikes in the past two years. Each company is expected to sell only about half of the 52,000 and 48,000 vans this year that they respectively sold in 1991. Both are imported from Japan, and the strong yen will keep prices high. At those low volumes, neither company can afford a major redo anytime soon.

The real winner in this tussle, of course, will be consumers. Thanks to all the new competition, minivan safety is finally matching tougher passenger-car standards. There will be better deals out there, too, as carmakers settle for thinner margins in the fight for market share. That's fine with Jack Terhar Jr.—and hundreds of dealers like him—who would welcome anything that can help lure today's reluctant buyers into the showroom.

By David Woodruff in Detroit

Inventing

CAVEAT INVENTOR

Oklahoma insurance broker Michael Grant plunged into the world of inventing four years ago, when his 6-year-old daughter was being treated for leukemia. In the hospital, he noticed that when the girl was given intravenous medication, the nurses taped a piece of cardboard to her arm to keep her wrist from bending, then wrapped more tape around a small cup over the needle. Whenever the nurses had to inspect the site, they had to unwrap everything. Grant reckoned that a board with adjustable straps would be more practical. After showing a sketch to hospital staffers, he was convinced he was onto something.

Grant has since spent about $15,000 trying to convince others. He has been issued two patents (another is pending), and he raised some cash by selling a piece of the action to friends and family. By enlisting the Oklahoma Commerce Dept.'s Inventors' Assistance Program, Grant found a small Tulsa medical-products company to license the armboard. Grant's royalty is 7 % on wholesale revenues—there have been no sales yet. And throughout the odyssey, Grant has kept his day job.

NO RESPECT. As Grant and [illegible] discovered, coming up with an idea is the easy part. Trying to turn that "aha" into a commercial success requires resources and skills beyond the scope of most independent inventors. While long odds face any inventor, the obstacles may seem insurmountable to the little guy. First, part-timers have trouble getting taken seriously. The attitude is: Truly meaningful innovations will emerge from a corporation, government lab, or university. The small-time tinkerer is seen as an eccentric toiling away in the garage on a perpetual-motion machine.

Before even pitching their widgets to the outside world, inventors should ask themselves some critical questions. What problem will the idea solve? Is the solution faster or cheaper than what is already available? Who is the competition? Is anyone else on the planet apt to care about the darn thing?

Inventors should run a patent search to make certain no one has beaten them to the punch. You can handle the search yourself by visiting the U.S. Patent & Trademark Office in Arlington, Va., or a Patent & Trademark Depository Library around the country. But it may be worth spending $500 to $1,000 to have a patent attorney do the search and interpret the results for you. For example, you may uncover 10 patents that your gizmo appears to infringe on. A smart lawyer can help you avoid stepping on anyone else's turf.

Once you're confident you have something unique that other people will spend money on, you should apply for protection. Some experts recommend that inventors compile a bound logbook, displaying key product-development dates, such as when you first sketched the idea or changed a design. You should have someone witness the event and sign the page. U.S. patents are presently issued under the "first-to-invent" principle. There have been rumblings recently about switching to the "first-to-file" concept used in most other countries. Such a switch is currently on the back burner, but if it ever goes through, it will place a further burden on independent inventors.

Securing a patent is expensive, time-consuming, and often dicey. You may spend $5,000 to $15,000 on attorney and patent fees and wait 18 months or more to see if your application will be approved. "The patent is a marketing maneuver set up to exclude competition," says Thomas E. Mosley Jr., author of *Marketing Your Invention* ($19.95, Upstart Publishing, Dover, N.H.). He advises petitioners to try to get as broad a patent as possible so as not to leave the door open for an-

er patent seeker with a ilar idea.

Federal patent examiners l try to reject many of r claims, so it makes sense look for an attorney or ent who will duke it out h them. Patent fees for iduals are half of what ge corporations pay. Filing a "utility" patent costs 5 for individuals and small npanies; if granted, you'll k over an additional $585. er that, costly maintenance s are due every few years. lity patents cover unique l "useful" machines or pro- ses and are good for 17 rs from the date they're ued. Design patents are eaper—$145 for filing, $205 en issued—and cover only aesthetic appearance of a oduct. They're good for a year term.

DDY SYSTEM. By the pat- -pending stage, it's time inventors to search for npanies to license and ss-produce the product. s rare when the creator o has the skills to build a nmercial venture around idea. "I'm resigned to the t that the best way to get product on the market is rough an established hard- re manufacturer," says w Hampshire inventor Da- l Brown, who concocted a dable sawhorse for build- . Brown pitched hardware npanies with a profession- three-minute video he had de for $720 and claims veral are interested.

In general, inventors seek- licensing partners should in their sights on small npanies, where they have a ance of hooking up with meone in a corner office. st large corporations won't en look at unsolicited inven- ns, in part because they don't want to hamper any of their own research and development efforts. (They may already have something similar in the pipeline.)

Toy giant Hasbro will not entertain unsolicited toy-and-game ideas from outside inventors, but the company will provide them with a list of brokers who work in their industry. The Small Business Administration's Small Business Development Centers, which are usually housed on college campuses, may also provide the names of key businesspeople in your area, along with basic financial, marketing, and technical assistance for folks who cannot afford private counseling.

Inventors are also banding together to help each other. "I have a data base of manufacturers throughout [my] state that are interested in working with new inventors," says Clayton Williamson, president of the Kansas Association of Inventors, one of several such self-help groups. You can find a local inventor group by contacting the United Inventors Association of the U.S. in St. Louis (314 721-3842). These groups run seminars, workshops, and trade shows. The Minnesota Inventors Congress recently held classes on "Licensing to Established Manufacturers" and "Guerrilla Options to Financing."

The groups also steer inventors away from organized invention-marketing scams, which take in about $200 million a year, according to the Inventors Awareness Group in West Springfield, Mass. These scams prey on inventors with false promises to promote their ideas. In April, the Federal Trade Commission charged the Invention Submission Corp. of Pittsburgh with "misrepresenting the nature, quality, and success rate" of its promotion services while charging fees ranging from hundreds of dollars to around $5,000. The case is pending.

PRECIOUS GRANTS. Finding financing is the bane of most inventors. Banks rarely lend money to inventors before they've got a patent, if even then. And their business must be fairly far along to get venture-capital funding. The Energy Dept. and the National Institute of Standards & Technology are joint sponsors of the Energy-Related Inventions Program, a grant given to inventors who find ways to save energy or produce nonnuclear power. In recent years, the average grant has been $83,000, though the chances of obtaining one are slim: Out of 30,000 proposals since 1975, some 450 have received funding.

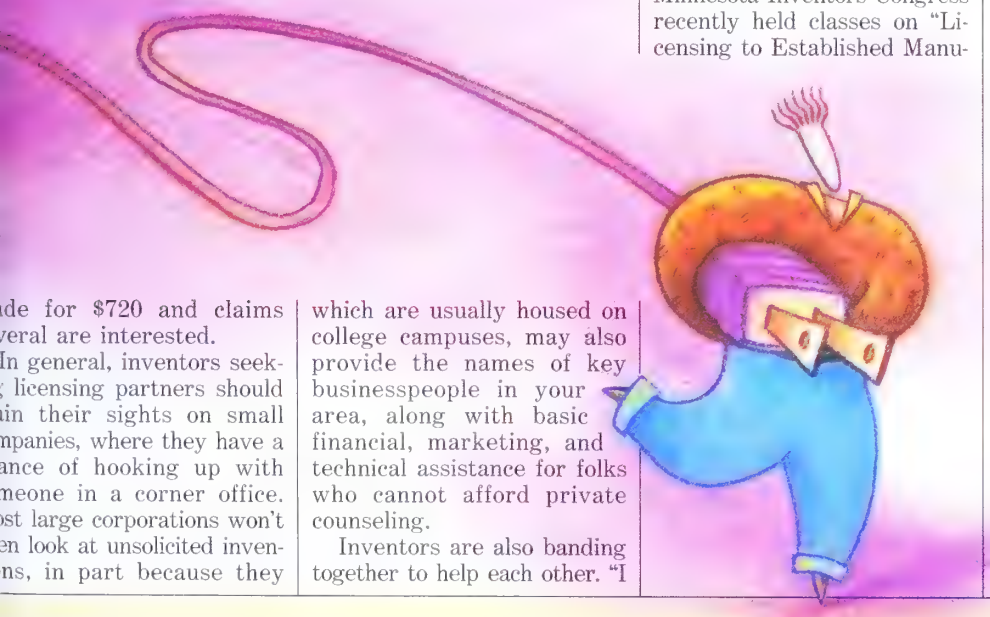
Inventors can always try matchmaking. The Technology Capital Network at MIT (617 253-7163) is a kind of computer-dating service for investors and entrepreneurs. Both sides put up $250 to get listed on the network for six months. Inventors submit a summary of their product and business plan. The financiers describe the types of companies they're willing to invest in. TCM gives inventors' names to the investor, and after that, it's up to the investor to make the first move.

But for inventors, it's best not to sit idly by the phone. Just because you've fallen in love with your concoction doesn't mean that suitors will soon be beating a path to your door. *Edward Baig*

TAKING AN INVENTION BEYOND THE GARAGE

- Determine if the idea is feasible. Conduct a patent search and, if appropriate, have the product technically evaluated by an independent consultant. Be careful who you show it to early on: Your idea is vulnerable until you've applied for a patent or other legal protection.
- If the idea makes sense, seek intellectual property protection by applying for a patent or copyright. Expect to spend $5,000 to $15,000 on the process.
- Conduct basic market research. Ask a librarian to run a search through on-line services such as Dialog or Data-Times to identify key players and competition.
- Find a manufacturer to build a prototype—perhaps by enlisting the help of a local inventors' group—or determine how to make the product yourself. Add up the cost of materials and parts.
- Show your prototype to industry experts. Ask buyers, sales reps, and consumers what they think.
- In most cases, you would want to license your product rather than start your own company to make and market it. If you choose the licensing route, contact a licensing agent to shop the invention around.

DATA: THOMAS E. MOSLEY JR., AUTHOR OF *MARKETING YOUR INVENTION*



Collecting

CASHING IN ON THE MVPs IN THAT OLD SHOE BOX

Collecting baseball cards is one of those innocent childhood hobbies that can turn into a lifelong passion. I should know. I started hoarding cards from bubble gum packs at the age of 9, and nearly two decades later, my collection numbers over 140,000. Jefferson R. Burdick became obsessed at age 10, and when he died in 1963 at 63, he owned more than 300,000 cards. On July 1, some of his most prized items went on public display for the first time at New York's Metropolitan Museum of Art.

Like most devotees, I didn't start saving cardboard images of my baseball heroes to make money. But my collection has been good to me: Selling a small part of it helped pay for college (although I gave up my 1968 Topps card of pitcher Nolan Ryan for $50 in 1984, and it's worth $1,500 today). I still pick up extra cash by unloading select cards as the need arises.

TOPP SELLERS. Pre-1980 cards in mint condition demand top dollar and are generally appreciating about 10% a year. But the market is soft for cards and sets printed after 1980. Collectors blame overproduction for the price weakness. Still, an astute trader who watches the stats can make money on recent editions. If a player appears headed for the Hall of Fame, his cards sell well and gain value. The same goes for current players the year they win a major award, such as Rookie of the Year or Most Valuable Player. But an off year or an injury will dry up the market in those cards, as happened with Texas Ranger outfielder Jose Canseco and White Sox designated hitter Bo Jackson (table).

If you still have your old collection stored away in boxes, you might be surprised at what some of the pieces are worth. But consider some advice from a war-scarred veteran before you plunge into the market and make a move you will regret. If you have a large number of cards, don't try to sell them all at once, unless they're all 1952 Topps numbered 311 or higher in perfect condition, which are the most sought-after and go for $200 each. You should pick out the ones of value, such as rookie cards of Hall of Famers, and only the ones you can bear to part with. If you idolize a player, whether it's Babe Ruth or former Mets outfielder Cleon Jones, don't sell his cards, unless you have duplicates. Take it from someone who still misses his 1967 Carl Yastrzemski: It's a decision you will mourn later.

Leave the dog-eared cards in the box, even if they depict Mickey Mantle or Willie Mays. Collectors only want mint or near-mint cards. Display your treasures in individual plastic sleeves. Using nine-card plastic sheets is a more economical way to store your collection, but the implication to a buyer is that you're trying to sell the whole sheet. To remove one card might damage it and is bad form for any card trader.

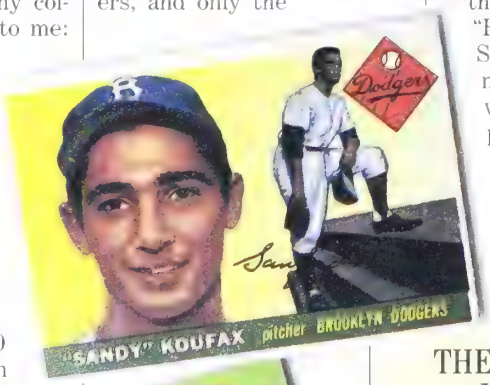
LOCAL HEROES. When you take the cards to a potential buyer, the first question will be, "How much do you want?" So you should first determine what the cards are worth—and the minimum price you will accept. *Beckett Baseball Card Monthly* (614 383-5772) or one of the card magazines from Krause Publications (715 445-2214) contain the most in-depth price listings. Make sure you grade your collection fairly. Calling a card mint when it has corner wear or creases won't bring a mint price. If you have a good relationship with a local dealer, you might ask for an assessment.

For maximum return, try selling to another collector. It may take longe but fellow collectors are mo likely to pay near 100% guide prices. Place an ad *Sports Collector's Digest*, Krause publication, or li your cards with its comput card-buying and -selling se vice. Detail what you have offer by condition and pric Membership to the "electron card shop" costs $79.95 ar includes a subscription to th magazine. Members pay $ an hour for time on the cor puter system.

If you need cash quickl sell to baseball card shop They'll buy, but at only 55 to 75% of market value, d pending on age, condition, ar marketability of the card. Ca around, ask if they would b interested in what you hav and check the publication Many dealers advertise wh cards they will buy and what price.

If those options don't pa out, put your cards on co signment at a store. Or rent table at one of the ma shows held each weeken Show schedules can found in collector mag zines. Selling prices a higher in regions whe players performed, so try to sell Atlan Braves cards when v iting my parents Georgia.

Remember that wh childhood heroes c sometimes bring ca they weren't intended investments. If y make money, great. not, you still have yo memories. *Chris Ro*



THE ROLLER COASTER IN CARD PRICES

	June '89	June '90	June '91	June '92	June '93
UPPER DECK Ken Griffey Jr. 1989	$4.00	$13.50	$40.00	$65.00	$55.00
TOPPS Bo Jackson 1987	$1.50	$4.00	$4.00	$2.50	$1.00
DONRUSS Jose Canseco 1986	$55.00	$60.00	$100.00	$80.00	$60.00
TOPPS Rickey Henderson 1980	$30.00	$85.00	$185.00	$150.00	$100.00
TOPPS George Brett 1975	$65.00	$100.00	$160.00	$200.00	$225.00
TOPPS Sandy Koufax 1955	$500.00	$800.00	$900.00	$1,175.00	$1,350.00

DATA *BECKETT BASEBALL CARD MONTHLY*

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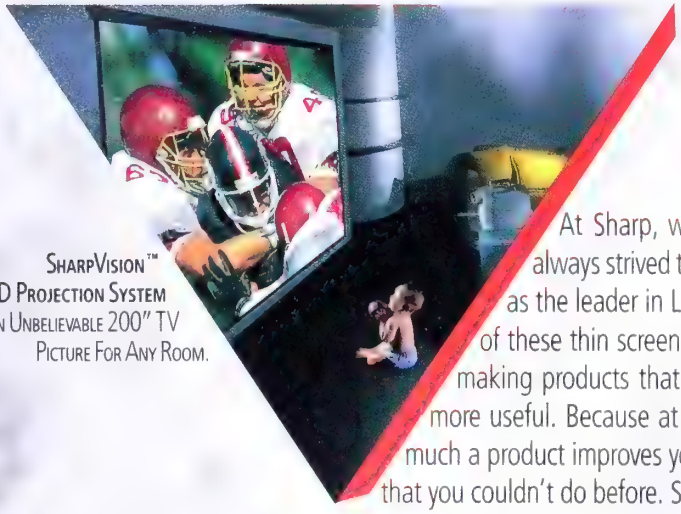

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1993 Sharp Electronics Corporation. Screen Sizes Measured Diagonally. Screen Images Simulated. Models Shown Clockwise From Top Right: VL-HL 100U Camcorder, OZ-9600 Touch Screen Wizard, XV H30U LCD Projection System, 4M-T30U LCD TV.

IN 50 YEARS

IT'S QUITE POSSIBLE

THIS SCENARIO

WILL BE REVERSED.

UNUM Corp. UNUM,® the lighthouse [illegible] "We see [illegible] Here's to a long life," are service marks of UNUM Corp.

Something quite wonderful is happening. We're all getting older. And living longer. Consider that, for the first time ever, the fastest growing segment of the U.S. population is over ninety years old. Or that by the year 2020, less than 30 years from now, one-in-three of us will be over the age of fifty.

Consider also that sometime in the not-too-distant future you could find yourself being called upon to provide for your parents, just as they once provided for you. Perhaps all that will be needed are a few words of love and reassurance. Perhaps something more.

Now consider a forward-looking company with a clear vision of what all this change means and how it will impact our lives. A company universally looked to as the leader in disability insurance. A company that has taken the next logical step by pioneering new approaches in long term care coverage to protect a lifetime of savings. And when you stop and think about it—well, it could be quite a lifetime.

Heck, we're 145 years old ourselves.

Here's to a long life.

UNUM
We see farther.

Health

RUNNING FOR (THE REST OF) YOUR LIFE

DOWNHILL RACER: HOLSTEIN NOW TAKES MORE TIME COOLING DOWN

This aging stuff creeps up on you. After running continuously for 25 years and passing the big Four-Oh, I'm beginning to realize I'm not invulnerable—as I once thought I was. If I want to keep on running into my golden years, it's time to start thinking and acting a bit differently. Suddenly, I know too many guys who have debilitating problems with their ankles, knees, hamstring muscles, or backs. Some have simply had to give up running and relapsed into couch-potatohood.

The big enemy is the pounding that running delivers to the joints and spine. I've never suffered a major injury, but lately I can feel an ankle that twinges and a lower back that occasionally aches. Call me a worrier, but it's best to tackle these problems before they get worse.

That's why I'm paying renewed attention to my shoes. I've worn Nike Airs for years, but now I'm experimenting with others. What I've found is that my air-filled shoes wear out over eight or nine months. To keep the spring in my step, I have to go out and buy another pair at $100 a crack. So, recently I purchased a pair of Asic Gels, which have gel pads as a shock-absorbing element, on sale for $40. The bounce so far is just as good, and I'll see if these shoes last longer. Even if they don't, I can more easily afford to replace them.

IF THE SHOE FITS. To be sure, even the experts don't agree on which running shoe is the right one. "The best shoe is the shoe that fits your foot best," says *Runner's World* Senior Editor Bob Wischnia, who conducts the magazine's shoe evaluations. He recommends that runners go to specialty running stores to try on a variety of shoes at different price levels. The most expensive isn't necessarily the best. Some shoes are wider or heavier than others, and some offer more arch support.

I haven't told my fanatic friends, but I also have started wearing an Ace bandage on my weak ankle, particularly when I play tennis or volleyball. In case the problem worsens, I'm looking at other forms of extra support, such as insoles and padded Thor-lo socks. Some older runners rely on custom-made orthotics, inserted into the shoe to provide maximum protection.

Another key element of any injury-avoidance program is the proper routine. When I was younger, I didn't bother to warm up or cool down—just ran like hell. But the pre-stretch is now more important, and I start running more slowly than I once did. Some aging runners use a slow running start to make a mental survey of their joints and muscles, identify any aches or stiffness, and then adjust accordingly. After most routine workouts, I also do a shoulder-stand to stretch out those old vertebrae that have just been pounded together.

> IF YOU WANT TO KEEP RUNNING AFTER 40, DON'T TRAIN AS HARD OR AS OFTEN

LAYING OFF. One fellow runner, in his 50s, jokingly calls this his "old maid" routine. But it's critical to keep problems from developing. Once you've been injured and have to lay off for a month, it's hard to get started again. This is the biological reality of aging: It's much tougher to come back after long layoffs. In the old days, I could stop for a couple of weeks and pick it back up without any real loss of stamina.

There's another biological reality that has to be faced: You can't run as hard or as often. My body can't take running every day, and I don't need that much to stay in shape. Four or five times a week is plenty, about 20 to 25 miles, slightly more if I'm getting ready for a race. "You have to change your perspective" as you get older, says Dr. Norbert Sander, a sports physician who won the 1974 New York City Marathon. "Either you limit the intensity of your training, or you'll have to stop runnin

Other tips to avoid injur

- Run on different surfac Since I usually work out concrete, I'm always looki for opportunities to run grass or on a cinder track.
- It's good to cross-train a with some swimming or bi cling. But watch the downh skiing, tennis, and basketb all of which are punishing the joints.
- If you have a minor pr lem, ibuprofen will help. Sa er recommends taking two three after running, not fore. If you take them befo the drug will mask any p and you might do more se ous damage. Applying ice ter a run can also help. you're in acute pain or t problem persists, swall your pride and call a doct

You may ask yourself: running gets trickier as y get older, why persever People have to answer t one for themselves. My go are to stay healthy, to be a to eat and drink without g ing weight, to stay fit enou to enjoy other sports, and keep up with my kids. E though I have to be more c servative, the fact is I'm s running—and enjoying it. A I can still whip past a f number of these young w persnappers. *Bill Holst*

dex to Companies

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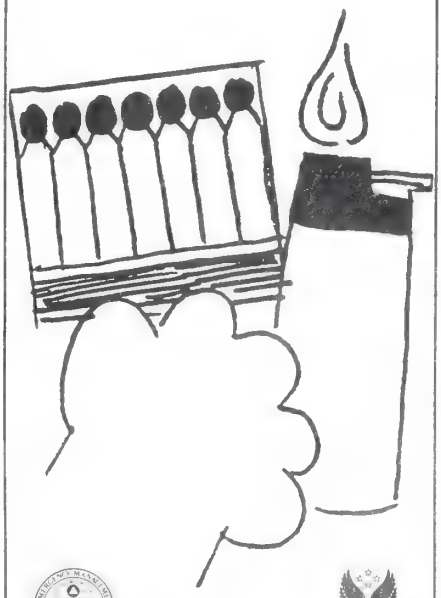
CURIOUS KIDS SET FIRES

When a kid strikes a match, fire strikes back! Children don't realize that a simple flame can blaze out of control in mere minutes. That may be why nearly twenty-five percent of the fires that kill young children are started by children themselves playing with fire.

Don't let fire strike your family. Always keep matches and lighters far out of the reach of children.



A message from your local fire department, this publication, and the U.S. Fire Administration.

Asia & The New China— Where The Growth Is

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September 20 through 22, 1993

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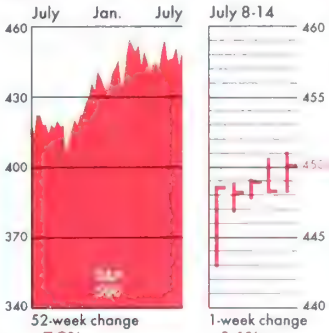
nvestment Figures of the Week

MENTARY

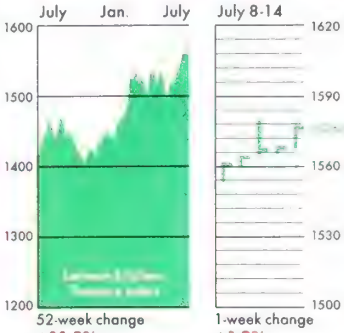
umbers on inflation came up —and the markets cheered. ews that the PPI fell 0.3% for and that consumer prices ed no increase at all sent prices flying. As rates on 30-Treasuries set another record stocks took off. The Dow d ahead almost 70 points for eek to within a whisker of the d, ditto for the S&P 500. Even o managed to break over the 00 level. Gold, which had ever-so-close to the $400-an-e mark, retreated.

STOCKS



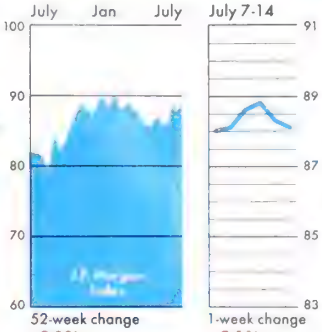
52-week change +7.9%
1-week change +1.6%

BONDS



52-week change +11.5%
1-week change +1.2%

THE DOLLAR



52-week change +8.1%
1-week change +0.1%

ARKET ANALYSIS

STOCKS	Latest	% change Week	% change 52-week
JONES INDUSTRIALS	3542.6	1.9	5.9
IZE COMPANIES (S&P MidCap Index)	167.7	0.6	16.4
L COMPANIES (Russell 2000)	237.8	2.0	24.4
OMPANIES (Russell 3000)	259.6	1.7	10.8

EIGN STOCKS	Latest	% change (local currency) Week	% change (local currency) 52-week
ON (FINANCIAL TIMES 100)	2832.3	−0.6	13.9
O (NIKKEI INDEX)	20,139.1	2.1	17.7
NTO (TSE COMPOSITE)	3941.7	−0.8	13.5

FUNDAMENTALS	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.06%	3.10%	3.25%
30-YEAR TREASURY BOND YIELD	6.56%	6 68%	7.63%
S&P 500 DIVIDEND YIELD	2.84%	2.84%	3.01%
S&P 500 PRICE/EARNINGS RATIO	21.3	20.9	23.6

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 26-week moving average	445.1	444.4	Positive
Stocks above 26-week moving average	58.8%	55.9%	Negative
Speculative sentiment: Put/call ratio	0.42	0.44	Positive
Insider sentiment: Vickers sell/buy ratio	2.32	2.27	Neutral

DUSTRY GROUPS

BRIDGE INFORMATION SYSTEMS INC.

R-WEEK LEADERS	% change 4-week	% change 52-week	Strongest stock in group	% change 4-week	% change 52-week	Price
ANUFACTURED HOUSING	17.6	41.4	FLEETWOOD ENTERPRISES	22.6	48.7	21
OSPITAL MANAGEMENT	17.0	5.5	NATIONAL MEDICAL ENTERPRISES	24.7	−25.4	11 3/8
OLD MINING	16.5	49.0	ECHO BAY MINES	26.8	103.9	13
RSONAL LOANS	14.2	36.0	HOUSEHOLD INTERNATIONAL	14.9	42.9	75
ROKERAGE FIRMS	12.4	50.0	MERRILL LYNCH	15.7	66.7	84 5/8
R-WEEK LAGGARDS	**% change 4-week**	**% change 52-week**	**Weakest stock in group**	**% change 4-week**	**% change 52-week**	**Price**
IOES	−17.5	−8.5	GENESCO	−23.5	51.2	7 3/4
OMMUNICATIONS EQUIPMENT	−16.8	0.7	NORTHERN TELECOM	−27.9	−30.5	26 1/2
PECIALTY APPAREL RETAILERS	−12.7	1.5	LIMITED	−15.0	2.5	20 1/2
ITERTAINMENT	−10.0	11.5	WALT DISNEY	−13.8	8.3	37 3/8
OLLUTION CONTROL	−9.8	−5.5	WMX TECHNOLOGIES	−12.3	−9.4	31 1/4

UTUAL FUNDS

MORNINGSTAR INC

DERS

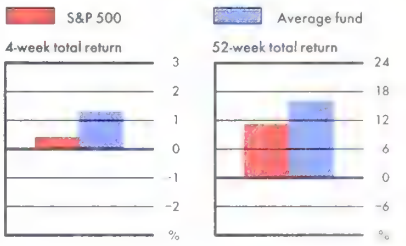
week total return	%
CEL MIDAS GOLD SHARES	24.6
NITED SERVICES WORLD GOLD	23.2
XINGTON STRATEGIC INVESTMENTS	21.6

eek total return	%
XINGTON STRATEGIC INVESTMENTS	103.4
HG GROWTH	79.1
CEL MIDAS GOLD SHARES	69.9

LAGGARDS

Four-week total return	%
DFA JAPANESE SMALL COMPANY	−10.5
CAPSTONE NIKKO JAPAN	−7.2
FIDELITY JAPAN	−6.7

52-week total return	%
DFA CONTINENTAL SMALL COMPANY	−14.8
INVESCO STRATEGIC HEALTH SCIENCES	−14.0
UNITED SERVICES EUROPEAN INCOME	−12.5



ELATIVE PORTFOLIOS

DATA RESOURCES INC.

ar amounts esent the present e of $10,000 sted one year ago ach portfolio

entages indicate day total returns

Foreign stocks
$12,672
+1.15%

Treasury bonds
$12,169
+0.82%

Gold
$11,173
+0.20%

U.S. stocks
$10,956
+1.51%

Money market fund
$10,233
+0.05%

ta on this page are as of market close Wednesday, July 14, 1993, unless otherwise indicated. ry groups include S&P 500 companies only; performance and share prices are as of market close July 13. Mutual fund returns are as of July 9. Relative portfolios are valued as of July 13. A more detailed explanation of this page is available on request.

CONGRESS SHOULD HANG TOUGH ON DEFICIT CUTS

As Congress sits down to reconcile its differences over President Clinton's massive five-year budget plan, some discouraging words are being heard. To some, notably Senator John B. Breaux (D-La.), the task of cutting the deficit by $500 billion over five years seems so large, and the political hurdles so high, that the plan ought to be scaled back to just $400 billion. The Administration is resisting, but others in Congress are likely to see a political benefit in pursuing a less ambitious goal.

That would be a big mistake. The projected $500 billion cut is a common element in both the Senate and House versions of the Administration's February proposal. It was the same $500 billion figure, and not the details of the tax hikes and spending cuts, that helped buoy the stock market and push down long-term interest rates to some of their lowest levels ever. Declining rates alone have provided an estimated $100 billion stimulus to economic growth. Reneging on that overall commitment now could very well jeopardize market confidence in Washington's ability to get control of economic policy. It would also send a signal abroad that a new Democratic President, outfitted with Democratic majorities in both House and Senate, can't govern effectively.

After a successful G-7 summit meeting in Tokyo, in which the U. S. demonstrated its determination to lead the industrialized nations out of a slump, this is no time to be wavering. Of course, it is tempting for politicians, who are being deluged with complaints from constituents about the specifics of the massive bill, to back down a little bit. Naturally, they'd rather avoid some of the more controversial provisions of the plan—such as the energy tax and cuts in Medicare. But $500 billion in deficit reduction ought to be the minimum goal. After all, even with the planned reduction in red ink, the national debt will still climb by some $1.2 billion over four years. Representatives might share that sobering thought with the next lobbyist looking for a break.

TRADE IN VIETNAM: LIFT THE EMBARGO

The U.S. involvement in Vietnam ended in 1975, but the economic war has dragged on for the past 18 years. Recently, President Clinton announced that Washington will stop blocking international efforts to help Vietnam pay off its debts to the International Monetary Fund, thereby allowing Vietnam to tap the IMF and the World Bank, as well as international commercial banks, for new development loans. Now, Clinton should go further and let the trade embargo expire in September, as it is set to do. It's time to declare an end to America's economic war with Vietnam.

For some years, the embargo on U. S. trade with Vietnam made sense. Vietnam had been an enemy, it occupied neighboring Cambodia for 11 years, and its government was not helpful in responding to inquiries about the fate of mo than 2,000 American GIs listed as missing in action.

But with time, the hardened attitudes have eased on bo sides. U. S. investigators say Vietnamese officials have co erated fully in resolving MIA cases, Vietnam signed the 19 Cambodia peace accord, and the Vietnamese clearly w come the prospect of foreign, especially U. S., investment. far, only a trickle of foreign investment has flowed into t country of 70 million—a country that many believe is pois to become the next Asian tiger.

It would be a shame if the U. S., whose history has be so intimately, if disturbingly, entwined with Vietnam's, fai to seize this opportunity to help remake Vietnam into modern and market-oriented economy. Already numero U. S. companies are in Vietnam, but they are allowed operate only small representative offices.

Leases on choice offshore oil fields have already be awarded to consortia from Australia, France, and Jap and many Japanese companies are reportedly gearing to go into Vietnam in a big way. Telecommunications and frastructure projects will require large investments and t participation of major multinational equipment supplie American business is ready to pitch in. President Clint should resist political pressure from the MIA lobby and let trade embargo against Vietnam expire.

A SENSIBLE BARGAIN AT NORTHWEST AIR

It could be a model for other labor-management deals the airline industry: Northwest Airlines Inc. recen concluded an agreement with its pilots and machinists ions, under which the unions will receive up to 37.5% the company's equity and three seats on the board in change for giving up as much as 15% of current wag Northwest, to be sure, was up against a wall: Heavily inde ed and flirting with bankruptcy, management had lit choice but to ante up to the unions.

The Big Three airlines—United, Delta, and America don't face such financial straits. They do, however, have cut costs. And if they hope to get the unions on board agreeing to wage givebacks or productivity gains, t might consider offering some equity in return, and possi board representation as well. Equity gives workers a big stake in the future performance of a company, while bo representation gives them a bigger say in its decision-mak

Such concessions don't sit well with the Big Three, wh are loath to dilute shareholder equity and feel that t shouldn't have to cede so much to the unions—especi when it's union work rules that have hobbled productiv and boosted costs. There's no doubt that management sho continue to press for relaxation of those work rules. And majors should also take a hard look at their overexpansio the hub-and-spoke system and shut down underused hu But if the Big Three don't contain costs now and try give workers an incentive to do so, in a few years t may find themselves fighting the same battles that t much weaker competitors are fighting today.

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NESS WEEK
August 2

BusinessWeek

GUST 2, 1993 A McGRAW-HILL PUBLICATION

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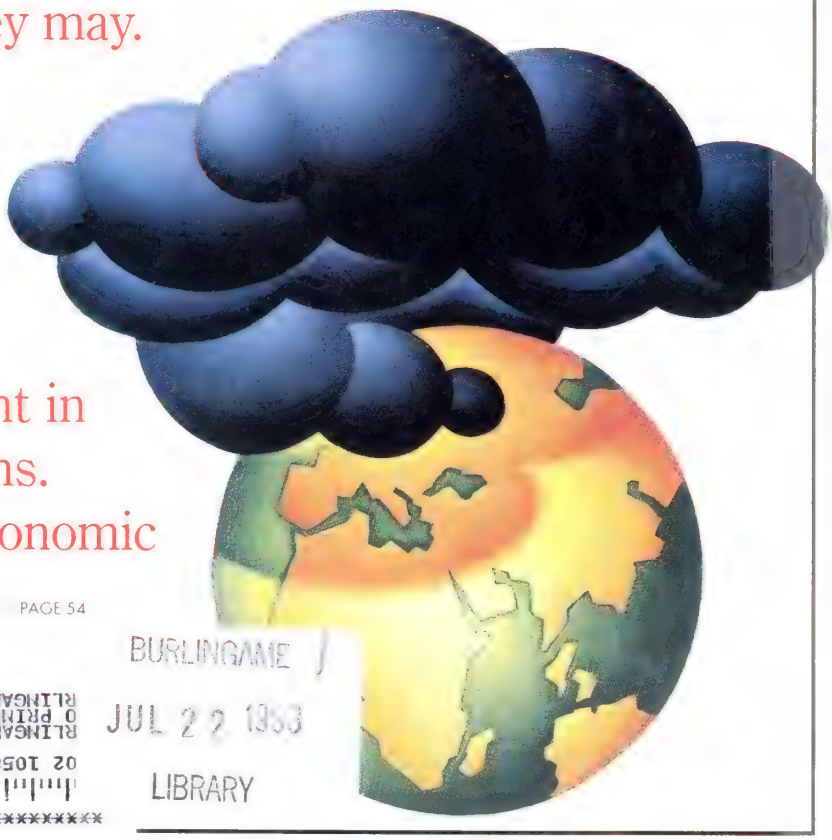
WHAT'S WRONG?

When communism collapsed and free markets blossomed around the world, the peace dividend and capitalism together were supposed to spur rapid economic growth. Ultimately, they may. But so far the world economy has faltered. High unemployment, slow growth, and severe wage and price competition are rampant in the industrialized nations. Welcome to the new economic order nobody expected. PAGE 54



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But now there's a new kind of sports car dedicated to the proposition that performance and civilized driving do not have to be mutually exclusive.

The revolutionary new Toyota Supra.

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Handling all of this pow

Buckle Up! Do it for those who love you. *Car and Driver, March 1993. **Always use your seatbelt. Driver and passenger side air bags are a supplemental restraint system.

a Supra. It's taken everything sports cars were before and crossed the line.

style double-wishbone sus-
. And when the need arises
a stop to such performance,
s ready with a 4-wheel, 4-
l Anti-lock Brake System
vith ventilated brake rotors.
ping weight down is the result
tensive weight management
n that maximizes the use of
loy metals, polymer-based
components and the kind of ingenuity that achieves a twenty percent reduction in carpet weight by hollowing out the individual carpet fibers.

Safety is treated as an integral part of the Supra performance philosophy. Standard dual air bags,** 3-point seatbelts and steel side-door intrusion beams help make Supra as reassuring to drive as it is quick and agile.

Ultimately, though, the real meaning of a sports car is found in the driving. And that's why, in designing the Toyota Supra, crossing the line was not just an end. It was a beginning.

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NUMBER 3330

BusinessWeek

AUGUST 2, 1

EMERGING CAPITALISTS: FIERCE NEW COMPETITION—FROM SIBERIAN COAL MINES, FOR EXAMPLE—HAS THE INDUSTRIALIZED NATIONS REELING

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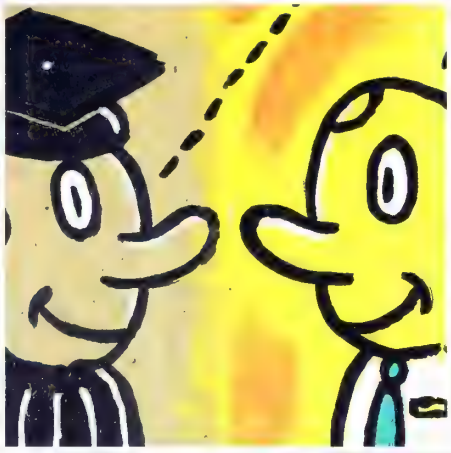

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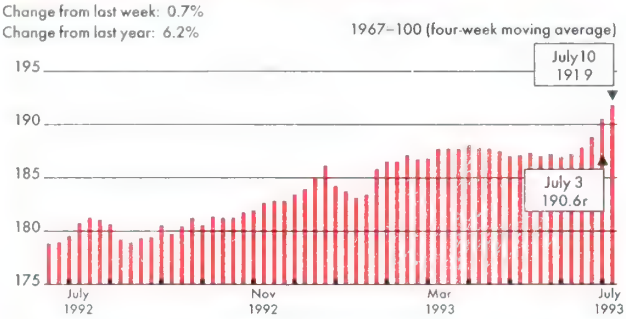
How rich and poor nations alike can reap the payoff from a new economic order

siness Week (ISSN 0007-7135) published weekly, except for one issue in January, by McGraw-Hill Inc. U. S. subscriber rate $44.95 per year. In Canada, one year: CDN $66. Single copies, $2.75; back issues, $5. ecutive, Editorial, Circulation, and Advertising Offices: 1221 Avenue of the Americas, New York, N. Y. 10020. Second-class postage paid at New York, N. Y., and at additional mailing offices. Postage paid at ntreal, P. Q. Registration Number 9010. Title Reg. in U. S. Patent Office. **Postmaster:** Send address changes to BUSINESS WEEK, P. O. Box 430, Hightstown, N. J. 08520.

BusinessWeek Index

PRODUCTION

Change from last week: 0.7%
Change from last year: 6.2%

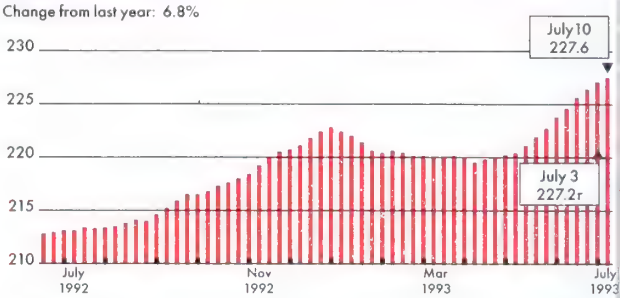


The production index increased during the week ended July 10. Rail-freight traffic was down sharply because of flooding along the Mississippi, but the heat wave on the East Coast lifted demand for electricity to a record level. Elsewhere, output of steel, trucks, paper, and paperboard declined, while lumber, autos, and coal production increased. Crude-oil refining was unchanged. Before calculation of the four-week moving average, the index fell to 193.4, from 193.6.

BW production index copyright 1993 by McGraw-Hill Inc

LEADING

Change from last week: 0.2%
Change from last year: 6.8%



The leading index increased further during the week ended July 10, suggesting that the economy will strengthen in the second half. Lower bond yields and faster growth in real estate loans offset slower growth in M2 and materials prices and an increase in the number of business failures. Stock prices were basically unchanged from the previous week. Before calculation of the four-week moving average, the index rose to 228.7, from 228.2.

Leading index copyright 1993 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (7/17) thous. of net tons	1,853	1,855#	6.3
AUTOS (7/17) units	76,325	62,759r#	−29.4
TRUCKS (7/17) units	50,067	43,983r#	−27.1
ELECTRIC POWER (7/17) millions of kilowatt-hours	68,739	68,987#	1.5
CRUDE-OIL REFINING (7/17) thous. of bbl./day	14,216	14,363#	0.8
COAL (7/10) thous. of net tons	13,941#	17,482	−17.1
PAPERBOARD (7/10) thous. of tons	814.6#	835.4r	6.1
PAPER (7/10) thous. of tons	757.0#	785.0r	3.7
LUMBER (7/10) millions of ft.	336.6#	426.4	−24.6
RAIL FREIGHT (7/10) billions of ton-miles	17.4#	21.0	−10.8

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA[1], SFPA[2], Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (7/21)	108	108	127
GERMAN MARK (7/21)	1.69	1.71	1.49
BRITISH POUND (7/21)	1.51	1.49	1.91
FRENCH FRANC (7/21)	5.80	5.87	5.03
CANADIAN DOLLAR (7/21)	1.27	1.28	1.19
SWISS FRANC (7/21)	1.50	1.51	1.32
MEXICAN PESO (7/21)[3]	3.122	3.125	3.097

Sources: Major New York banks. Currencies expressed in units per U. S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (7/21) $/troy oz.	392.400	394.400	9.4
STEEL SCRAP (7/20) #1 heavy, $/ton	118.50	118.50	33.9
FOODSTUFFS (7/20) index, 1967=100	205.8	205.8	3.7
COPPER (7/17) ¢/lb.	90.5	92.0	−24.3
ALUMINUM (7/17) ¢/lb.	56.3	57.6	−5.9
WHEAT (7/17) #2 hard, $/bu.	3.27	3.14	−8.1
COTTON (7/17) strict low middling 1-1/16 in., ¢/lb	56.13	55.01	−8.5

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, *Metals Week*, Kansas City market, Memphis market

LEADING INDICATORS

	Latest week	Week ago	% Chang year ag
STOCK PRICES (7/16) S&P 500	448.42	445.26	7.
CORPORATE BOND YIELD, Aaa (7/16)	7.16%	7.22%	11.
INDUSTRIAL MATERIALS PRICES (7/16)	94.9	95.4	−3.
BUSINESS FAILURES (7/9)	375	349	−13.
REAL ESTATE LOANS (7/7) billions	$402.3	$401.3r	−0.
MONEY SUPPLY, M2 (7/5) billions	$3,468.8	$3,469.8r	1.
INITIAL CLAIMS, UNEMPLOYMENT (7/3) thous.	332	339	−17.

Sources: Standard & Poor's, Moody's, *Journal of Commerce* (index: 1980=100), Dun & Bra street (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjus data on business failures and real estate loans

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Chang year ag
RETAIL SALES (June) billions	$171.9	$171.2	6.
INDUSTRIAL PRODUCTION (June) total index	110.1	110.3r	3.
CAPACITY UTILIZATION (June)	81.2%	81.5%r	2.
HOUSING STARTS (June) annual rate, thous.	1,254	1,254r	9.

Sources: Census Bureau, Federal Reserve Board, Commerce Dept.

MONETARY INDICATORS

	Latest week	Week ago	% Chang year ag
MONEY SUPPLY, M1 (7/15)	$1,078.6	$1,076.8	12.
BANKS' BUSINESS LOANS (7/7)	275.7	276.6r	-1.
FREE RESERVES (7/7)	1,028r	616r	75.
NONFINANCIAL COMMERCIAL PAPER (7/7)	159.7	153.1	11.

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed for two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	Ye ag
FEDERAL FUNDS (7/20)	3.08%	2.99%	3.22
PRIME (7/21)	6.00	6.00	6.00
COMMERCIAL PAPER 3-MONTH (7/20)	3.08	3.19	3.40
CERTIFICATES OF DEPOSIT 3-MONTH (7/21)	3.16	3.14	3.32
EURODOLLAR 3-MONTH (7/16)	3.18	3.14	3.31

Sources: Federal Reserve Board, First Boston

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipmen
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

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Readers Report

THE REFRIGERATOR RACE: INNOVATION WORTH REPEATING

I found "The great refrigerator race" (Design, July 5) especially interesting. The Super Efficient Refrigerator Program contest, launched by a group of utilities, not only spurred contestants to explore important technologies and examine their product-development processes but also called for determination, teamwork, and clever maneuvering.

The contest is an innovative idea and encourages healthy competition in the industry. In light of the inevitable global competition ahead of us, the U. S. could use more such ideas to reinvigorate its manufacturing industries and achieve technological leadership.

Suresh Sekaran
Pittsburg, Kan.

SOCIAL SECURITY IS UNFAIR TO THE YOUNG

Bravo to Gary Becker for "How to secure Social Security's future" (Economic Viewpoint, July 12). As he correctly noted, the crux of the problem is how the world has changed since Roosevelt created the Ponzi scheme—I mean the Social Security program—back in 1935.

When Social Security was set up, there were 55 workers for every retiree, so taxes for the old-age program could be kept low. Today, the average American lives to 75, and the ratio of workers to retirees has dipped below 3 to 1. A recent forecast from the Social Security Administration noted that, in 2030, the ratio will dip below 2 to 1. In the future, either benefits will be paltry or taxes will be astronomical to support the baby boomers.

Ida Mae Fuller, the first Social Security beneficiary, got 900 times what she paid in. The average worker retiring today gets back all contributions in less than six years. Since I am still in my early thirties, however, I am currently projected to recover less than one-eighth of what I should get back based on my "contributions," plus a reasonable level of investment returns.

Who would support such inequity? Certainly not today's young. Although I am 100% behind Becker's move toward privatization, I am not optimistic about seeing any change soon. Regrettably, lobbying efforts by the American Association of Retired Persons will protect the generational wealth-transfer scheme until the government can no longer pay benefits.

Mark A. Grimmett
San Gabriel, Calif.

THREE CHEERS FOR A HEALTH PLAN THAT DOESN'T BREAK THE BUDGET

Stan Crock is right on target with his prescription for U. S. health-care reform ("Radical surgery for medicine? Hold that scalpel," Social Issues, July 12). His ideas outperform the 500 or so people on the White House's task force. His combination of near-term, practical steps would quickly set the U. S. on the road toward effective reform without derailing a sluggish economy with massive new costs, higher taxes, or additional layers of bureaucracy.

Dr. Kenneth B. Heithoff
Chairman and Medical Director
Centers for Diagnostic Imaging
Minneapolis

A PENETRATING LOOK AT CONTACT-LENS PRICING

Congratulations! Finally, the "story" ("Contact-lens sellers just don't see eye-to-eye," Top of the News, July 12) has been put before the public: A major company has been selling the exact same contact-lens product at three different prices.

As an optometrist who would not be dictated to by the "sales rep," I applaud your efforts. It is embarrassing that our professional contact-lens journals and the leaders in the field did not report the story over a year ago.

Robert L. Pazen
Peer Review Chairman
Tri-County Optometic Society
Ventura, Calif.

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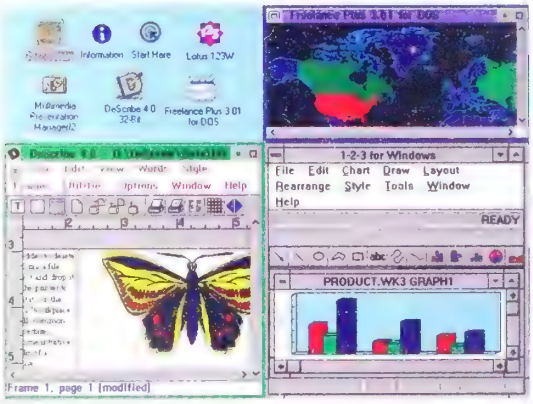

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S&L HELL
By Kathleen Day
Norton • 384pp • $24.95

TRUST ME
By Michael Binstein and Charles Bowden
Random House • 420pp • $25

THE S&L COLLAPSE: DID ANYONE LEARN ANYTHING?

Try this quiz: The collapse of the savings and loan industry during the 1980s was caused by:

A) Reagan-appointed regulators who freed the industry to engage in wildly speculative lending;

B) Greedy thrift operators who plundered their institutions to support lavish lifestyles;

C) Cowardly politicians whose reluctance to shut down the party drove up the costs of the rescue; or

D) All of the above.

The answer is hardly trivial, as most taxpayers now know. While the U. S. economy has endured speculative booms and busts before, few events matched the magnitude of the thrift debacle, which will cost $200 billion plus interest. Of course, the answer to the quiz is D, and two new books go a long way in explaining just why this is so. *Trust Me: Charles Keating and the Missing Billions* profiles the best known of the many cowboy entrepreneurs who flooded into the industry after Washington deregulated S&Ls in the early 1980s. A collaboration between Washington journalist Michael Binstein—who now shares a column with legendary muckraker Jack Anderson—and Arizona writer Charles Bowden, *Trust Me* is chockful of revelations about the politically ultraconservative Cincinnati lawyer who went West to construct a fragile financial empire out of Arizona sand.

The authors unearth rich detail about the enigmatic Keating, whose life is a bundle of contradictions. How else to explain Keating, a devout Catholic who gave generously to religious and charitable causes, but whose female employees were sometimes pressured into undergoing breast-enlargement surgery? A man who flew in Mother Theresa to bless his Phoenician Hotel, but who acted in a self-indulgent, uncontrollable fashion at corporate parties, once tossing china, crystal, and clocks into a swimming pool? A slave to detail who fussed over every menu item at his hotel restaurants, but who on a whim would lend millions of dollars to virtual strangers?

Two books track down the culprits, but banking reform is what the U.S. really needs

As well-reported as it is, *Trust Me* nonetheless figures as one of the most unconventional business books of recent years. In their effort to capture the surreal atmosphere that permeated Keating's financial empire, the authors resort to literary devices that give the book the feel of a novel, such as recounting events in the present tense. But unfortunately, the prose is often overwrought, and when the authors try to become cosmic, it comes out comic: "There is in Charlie Keating a hatred of control. And also, a deep hatred of things out of control. Or perhaps not a hatred but a deep fear..." With a subject as colorful as Keating, this is one story that needs no embellishment.

By that standard, *S&L Hell: The People and the Politics Behind the $1 Trillion Savings and Loan Scandal*, by Kathleen Day, succeeds much better. Day relie on extensive legwork from her year spent covering S&Ls as a *Washingto Post* beat reporter to provide a behinc the-scenes look at how Washington mi handled what became an orgy of speci lation. She paints unflattering pictures legislators and regulators blinded to th gathering clouds by their cozy relatio ship with S&Ls. Day recounts, for in stance, a 1985 Christmas party at whic Federal Home Loan Bank Board staffe staged a skit mocking their boss, E Gray, as a puppet on the knee of thri lobbyists.

If there's a shortcoming to Day's otl erwise admirable reporting effort, it her inclination to reconstruct the S& disaster as a morality play, with most the losses resulting from avarice, frau and incompetence. That's a deceptivel simple view of the disaster, which wa largely the result of structural prol lems. Yes, the shenanigans of Keatin and other fraud artists cost taxpaye billions. But the sad fate of the thrift i dustry was largely sealed by the earl 1980s, thanks to the double-digit infl tion of the prior decade that cripple thrifts left holding 3% mortgages. I the 1970s, Congress aggravated matte by letting S&Ls offer higher intere rates to depositors without lifting i vestment restrictions. That made profi ability all but impossible.

Alas, by 1982—when Day's narrativ moves into high gear—much of the dan age was already done. According to th Congressional Budget Office, fraud re resented between just 3% and 25% the cost of the S&L cleanup. Much the other money went to pay for th losses on the low-interest mortgage taken out by middle- and upper-clas Americans during the 1960s. Whe interest rates soared during the 1980 these same people bought certificat of deposit from shaky Texas S&Ls yiel ing 12% or more. When the thrifts co lapsed, the government bailed these d positors out.

This might not matter, except th in Washington, politicians seem just inclined as journalists to make scap goats of such rogues as Keating rath than enact politically unpopular refor of the financial system—namely, curta ing the liberal deposit-insurance pr gram that represents a middle-class e titlement. *Trust Me* and *S&L Hell* mak for engaging reading, but they rais questions about whether we hav learned the right lessons from the thri crisis and whether we might be doom to repeat those mistakes again.

BY DEAN FOU

Washington Correspondent Foust cove banking and finance.

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WHY CLINTON CAN'T HAVE FREE TRADE AND HIGHER TAXES

BY PAUL CRAIG ROBERTS

Pressure on Japan to open its markets is legitimate, but tax hikes at home aren't. That will just squeeze American pocketbooks—which will effectively limit U.S. markets for everyone else

Is the Clinton Administration for free trade or managed trade? At the Group of Seven economic summit held July 7-9 in Tokyo, President Clinton pursued both. But the multilateral General Agreement on Tariffs & Trade does not jibe with a bilateral U. S.-Japan deal that would favor U. S. products in Japanese markets.

Lacking a bilateral agreement at the conclusion of the summit, President Clinton used his news conference to stress a GATT breakthrough that, "if finally concluded," would spur job growth in the global economy. But this news was soon eclipsed when Japan's ruling Liberal Democratic Party decided hours before Clinton's departure that its political future depends on its ability to manage the U. S. "relationship" and agreed to negotiate a bilateral agreement.

Of course, no accord has been reached—just a disputed framework that could lead to an agreement sometime in the future. But the rapidity with which the postsummit U. S.-Japan trade "pact" became Clinton's big news is indicative of his Administration's proclivity for a government-managed economy. The Japanese, by their resistance, and the U. S., by its insistence, have made it clear that the Clinton team is after managed trade, with specified numerical shares of Japanese markets as a way of reducing the U. S. trade deficit with Japan. Ambiguous wording in the "agreement to agree" permits the Japanese to claim that no quantitative targets will be forthcoming—while allowing the U. S. to claim that "objective criteria" have been set to evaluate U. S. success in penetrating Japanese markets.

Pressure on Japan to open its economy is legitimate, but Clinton is undermining a free-trade agreement by negotiating privileged access to Japan's markets. How can Clinton make a compelling case for GATT or the North American Free Trade Agreement when he places so much stress on curing a specific trade imbalance with Japan? As Japanese Prime Minister Kiichi Miyazawa told Clinton, free trade means imbalances between countries in imports and exports.

COST BARRIER. The worst summit mistake was the failure to realize that macroeconomic policy can be as effective in closing markets as tariffs, quotas, and a uniquely Japanese cultural refusal to buy foreign goods. Witness Clinton's inconsistency as he pressures Japan to open its markets while he is in the process of limiting ours to the Japanese—and everyone else—by raising taxes. With less disposable income in consumers' pockets, the demand for imports will fall, as will the demand for domestically produced goods. Recession restricts trade, and rising unemployment stirs xen phobic responses to imports, prompting polit cians to turn to trade restrictions as a way protecting domestic jobs.

Clinton's tax increase is likely to wreck th prospects for GATT and NAFTA. In recessionar Europe, the Organization for Economic Coope ation & Development forecasts that unem ployment will reach 12% next year. Japan suffering the consequences of a wrenching a set deflation that has impaired many balanc sheets. The U. S. economy has not yet reco ered from the 1990 tax increase. Clinton ha decided to treat this economic sluggishnes by bleeding the world economy with wha even many Democrats recognize as a contra tionary fiscal policy.

"PROTECTIONIST PARTY"? Senator Jim Sass (D-Tenn.) complains that "we are doing th same thing we did in 1990." Senator Paul Sa banes (D-Md.) shares Sasser's concerns " falling back into recession as a result of th very restrictive fiscal policy we are about t adopt." Senator Frank Lautenberg (D-N. J recently told President Clinton: "I cann throw my constituents in the state of Ne Jersey overboard to keep this [tax increas afloat."

Senator Daniel P. Moynihan (D-N. Y.) r cently acknowledged: "Our party has become protectionist party." A protectionist party tha throws the country into recession with a ta increase will be quick to divert attention to in ports as the explanation for mounting job los es. It is difficult to imagine a more inoppo tune development for Latin America, Easter Europe, Russia, and China—all struggling t recover from decades of socialism and mar aged trade and all in need of access to worl markets. For the sake of improbable deficit r duction, Clinton is throwing away their chan es to build successful socioeconomic system based on capitalism.

If higher taxes spurred the economy, th deficit would not have doubled under Pres dent Bush. Clinton claims that economic ben fits will flow from a higher tax burden. Yet h Administration has already reduced its re economic growth forecast for 1993 by 0.6 from 3.1% to 2.5%, before any tax increas have taken effect. Using the Administration budget rules, this reduction in growth raise the budget deficit by $65 billion over the 199 98 period. If the growth slowdown continu beyond 1993, the cumulative increase in th deficit will be $208 billion.

Clinton's tax hike will shrink growth by f more than 0.6%, and the rise in the defic will match the rise in unemployment, prote tionism, and political turmoil.

PAUL CRAIG ROBERTS IS CHAIRMAN OF THE INSTITUTE FOR POLITICAL ECONOMY IN WASHINGTON

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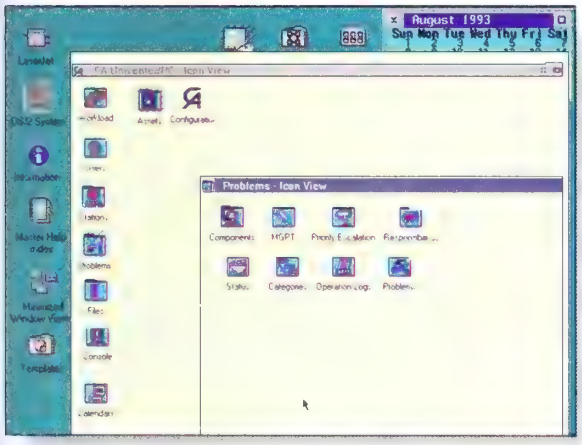

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IBM

BY GENE KORETZ

WHY AMERICA'S CRAVING FOR IMPORTS IS LIKELY TO GROW

Any way you slice them, the trade numbers are disturbing. The deficit, after declining by 56% between 1987 and 1991, has been rising sharply. So far this year, the trade gap is up more than 50% from its year-ago level.

A widening gap is hardly surprising: America's economy has been expanding for two years, while most of its major trading partners have been mired in recession. Indeed, U. S. exports have proved unexpectedly resilient in recent years, as rising shipments to the emerging economies of Asia and Latin America have helped offset slowing demand from industrial nations. That performance suggests that exports could really take off, once the global economy picks up within the next year or so.

U.S. IMPORT PRICES ARE SURPRISINGLY WEAK

▲ INDEX: 1987=100 *NONOIL, NONFOOD IMPORT PRICES DIVIDED BY CORE PRODUCER PRICE INDEX

DATA: BUREAU OF LABOR STATISTICS, MORGAN STANLEY & CO.

Unfortunately, the import side of the equation is less reassuring. Imports exploded this year, far outpacing domestic demand and now accounting for a record 25% of U. S. purchases of goods. According to Stephen S. Roach of Morgan Stanley & Co., "this new wave of import penetration just wasn't supposed to happen in a period when wage restraint and productivity gains have turned America into a low-cost producer among industrial nations," and when the dollar has sunk below its early-1980s level.

To explain the import deluge, Roach points to an unusual trend: a notable decline in relative import prices. As expected, the onset of dollar weakness in 1986 caused import prices to rise faster than prices of domestically produced goods, helping to narrow the huge trade deficit. But since 1988, he notes, while the dollar has stayed weak, import prices have fallen in relative terms (chart). That is, they have risen less than domestic goods prices.

Two trends, says Roach, are apparently enabling import prices to resist the upward push of dollar weakness. The first is rising computer shipments from offshore facilities established by U. S. multinationals to capitalize on cheap labor. The second is soaring imports of consumer goods from low-wage nations in Asia and Latin America.

Economic theory says these developments should help America's trade performance long-term. Low-cost computers let U. S. companies lift productivity and competitiveness. And imports of consumer goods lift export prospects by raising living standards overseas.

Such future benefits, however, are cold comfort to Americans today. Near-term, the growing price competitiveness of imports is detracting from U. S. output and incomes just when the economy seems to need all the help it can get.

NO CURE IN SIGHT FOR RUSSIA'S STAGGERING HEALTH CRISIS

While world attention is on the former Soviet Union's economic woes, Georgetown University demographer Murray Feshbach points to a more intractable problem: its health and environmental crises. Writing in *The American Enterprise*, Feshbach offers stark statistics of disasters whose dimensions are "only beginning to be known."

Consider: While male life expectancy in the U. S. has risen by five years, to 72, since the mid-1960s, in the former Soviet Union it has fallen by four years, to 62. Infant mortality is rising, and 60% of infants have health problems. One-quarter of children under 5 develop anemia or rickets. As a result of radioactivity released at Chernobyl and of pollution from nuclear, chemical, and biological facilities, and from mines and industrial sites, congenital birth defects appear to have increased by 30% to 40%. A 1990 report found that one adult in four was chronically ill.

Meanwhile, the health system has broken down. While hospitals turn patients away because of lack of medicines, many avoid hospitals and clinics altogether because they fear infection from unsterilized syringes. Although Western aid can alleviate some health and environmental problems, Feshbach warns that their scope and complexity suggest progress will be painfully slow.

INFRASTRUCTURE SPENDING: STIMULANT OR DEPRESSANT?

Remember the fuss about infrastru ture spending? In 1991, Congre passed a surface-transportation bill d signed to boost federal outlays by $8 billion over five years. And last yea President-to-be Clinton promised to stir ulate the economy by raising investme in highways, bridges, airports, and oth public works.

In 1993, however, infrastructu spending has actually declined. Econ mist David Hale of Kemper Financi Services Inc. points out that, so far th year, real outlays for public constru tion are running 6% below the same p riod last year. State and local gover ments' budgetary woes have force them to cul spending on infrastructur he explains. And public concern abo the deficit and coming tax hikes a leading the Administration and Congre to try to curtail most forms of discr tionary spending, including highways.

Because of Capitol Hill's austerit mood, says Hale, infrastructure spendi is now in danger of becoming a for that intensifies economic sluggishne rather than fosters faster growth.

THE TAX HAUL OF '93 POINTS TO HIDDEN ECONOMIC STRENGTH

The consensus among economists that real growth in the second qua ter, to be released in late July, will co in at less than 2%. But economist J seph G. Carson of Dean Witter Reynol Inc. thinks it could be 2.6% or more.

Carson bases his prediction on feder tax receipts. In June, corporate incom tax payments were 16.8% higher than year ago. Part of that is due to a la change that makes companies pay mo in the quarter they earn the incom But Carson figures corporate paymen are up at least 12% from last year. A federal withheld individual income a payroll tax receipts (excluding estimate tax payments) are up 5% to 6% ov 1992, even though the government est mates that wage and salary income running only 4.5% ahead of last year.

"Companies and individuals don't p taxes on phantom income," argues Ca son. "Tax revenues are pointing to stronger economy than the consens expects and one that clearly gain strength at the end of the quarter."

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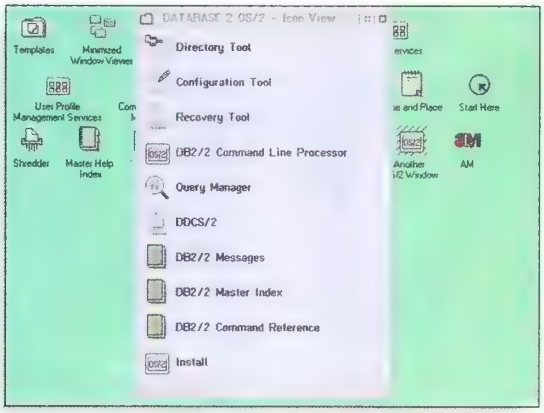

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2) To work toward a health care plan that provides all Americans with coverage for prescription medicines. Some people fall through the cracks of the current system. That's why we favor protection for everyone.

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Pfizer

We're part of the cure.

UGUST 2, 1993

BY JAMES C. COOPER AND KATHLEEN MADIGAN

GENERAL GREENSPAN TRAINS HIS GUNS ON INFLATION

Monetarist Milton Friedman and Keynesian Paul A. Samuelson are ideologically opposite economists with at least one common belief: Both hink U. S. monetary policy is too tight. Federal Reserve Board Chairman Alan Greenspan's blunt response: "I do hink they are both wrong."

And so it went during Greenspan's semiannual trip to Capitol Hill on July 20 to defend the Fed's conduct of montary policy. For someone whose job it is to mince words t these affairs, the chairman was unusually clear. His nessage: The economy is out of danger, the Fed's top pririty is inflation control, and the next policy move is ightening—it's just a matter of time.

HOW THE FED SEES THE ECONOMY

CENTRAL TENDENCY PROJECTIONS: PERCENT CHANGE Q4 TO Q4

	1993	1994
REAL GDP	2.25% to 2.75%	2.5% to 3.25%
CPI INFLATION	3.0% to 3.25%	3.0% to 3.25%
UNEMPLOYMENT RATE (Q4 LEVEL)	6.75%	6.5% to 6.75%

DATA: FEDERAL RESERVE BOARD

The Fed chief said the economy, while not especially bubbly, is "clearly not about to tilt over into a significant state of weakness or contraction." On inflation, Greenspan sounded downright hawkish. He said the news on inflation this year could only be characterized as "disappointing," the disination process seems to have "stalled," and inflation expecations appear to have "tilted upward."

Greenspan's tough talk took the credit markets by surrise. Short- and intermediate-term interest rates jumped s any lingering expectations of another Fed rate cut anished. Long-term rates ended up little changed, as he bond market seemed reassured that the central bank vill not tolerate higher inflation.

PARADIGM LOST, PARADIGM REGAINED

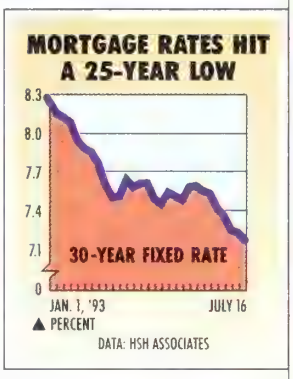
In another unexpected twist, the Fed chairman offered real interest rates—market rates minus inflation—as a long-term guide for Fed policy. Under that new pardigm, current policy would have to be characterized as oose and potentially inflationary. That's because the real ederal funds rate, now near zero, is very low compared vith its historical average of about 2%.

That's a sharp reversal from the low-inflation signals iven by the Fed's previous policy guide, which relied on he growth rate of the M2 money supply. Greenspan said hat the Fed has all but dropped M2 as an indicator of fiancial conditions because it is no longer reliable.

The Fed chairman was not at all sympathetic to the oncerns generated by the latest round of soft economic lata. Housing starts were flat in June despite mortgage rates at a 25-year low (chart). June industrial production fell for the second consecutive month. And in July, the University of Michigan's index of consumer sentiment wilted to a nine-month low. Economic growth had already faded to 0.7% in the first quarter, with growing concerns about the second quarter as well.

Not to worry, says Greenspan. In an unusually bold forecast for a Fed chairman, he said that second-quarter real gross domestic product—to be released on July 29—was clearly in excess of 2.5%.

Moreover, a quickening of growth in the second half is implicit in the central bank's latest economic projections for 1993 and 1994 (table). For '93, the Fed forecasts growth of 2¼% to 2¾%. If Greenspan is right about the second quarter, that means the central bank expects second-half growth in the neighborhood of 3.5%.



Despite the weak-looking data of late, the Fed's forecast may well be on the mark. Second-quarter GDP should show a healthy mix of growth in final demand and a slower pace of inventory growth. That's just the opposite of what occurred in the first quarter, and that combination sets the stage for a better performance of industrial output in the second half.

Even though confidence is flagging, consumer spending appears to have grown at an annual rate of about 3% in the second quarter. If second-half job growth at least matches the 1 million jobs created in the first half, consumers seem able to maintain that pace.

Also, business investment in equipment should continue to bolster growth because of low interest rates and solid profits. The trade deficit isn't likely to widen as much as it did in the first half. And while the full impact of lower mortgage rates has not yet shown up, it will. Mortgage applications to buy a home are on the rise.

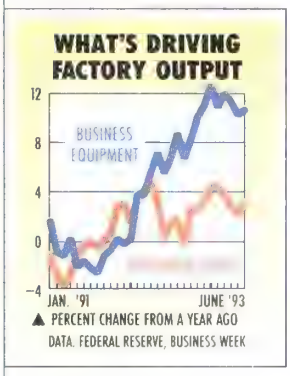
MIDWEST FLOODS PUT HOUSING ON HOLD

For now, housing and industrial production look pretty anemic. Housing starts in June held at their May annual rate of 1.25 million, while single-family starts dipped by 2.8%, to 1.08 million.

The lack of strength, though, partly reflects the heavy rains that began in mid-June in the Midwest and in areas of the South. Starts in both regions fell in June, while new home construction in the Northeast and West posted sol-

id gains. The hit should be even harder in July, when the full brunt of the flooding shows up in the data.

A rebound in the housing market would bring a welcome boost to demand for home-related goods. Because of the weather-related buildup in retail inventories over the winter, orders for consumer items have suffered, putting the brakes on production. Over the 12 months ended in June, output of consumer goods has edged up 3%, compared to the stronger 10.7% gain in the production of business equipment, mostly computers (chart).



Overall, industrial activity was lackluster in the second quarter. Output fell 0.2% in June, after a 0.1% dip in May. Total operating rates stood at 81.2% in June, down from 81.5% in May. For the quarter, output grew at a 1.8% annual rate—less than a third of its 5.6% advance in the first quarter.

Manufacturing will enjoy a stronger third quarter, though. True, July will be a wash because the Mississippi flooding halted most cross-country cargo and closed some factories. But auto production is expected to increase this quarter. And retailers continue to draw down their inventories, setting the stage for more ordering later on.

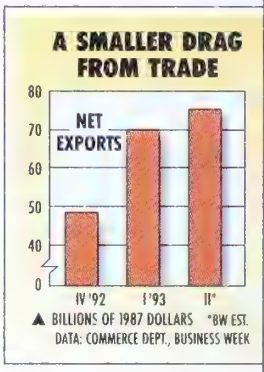
Business inventories rose 0.2% in May, but store stockpiles were unchanged. Thanks to sales gains in April and May, retailers have wheedled down their inventory-sales ratio from a bloated 1.61 in March to 1.58 in May.

THE FED CAN'T FIX GLOBAL RECESSION

But other drags in the industrial sector point out the challenges the Fed faces in keeping this economy on track. Simply put, structural problems can't be solved by monetary policy. Low interest rates will hardly help to curtail defense cuts, and an anti-inflation stance can't correct the global recessions now holding back U. S. exports.

Looking overseas, the central bank is likely anticipating that growth in the other industrialized countries will pick up by next year. Stronger growth overseas would lessen the risk that the Fed will be raising rates next year while other countries are cutting them. In addition, a global turnaround could help reverse the deterioration in the U. S. trade picture.

The U. S. merchandise trade deficit, which had widened greatly from last December through April, narrowed in May. The gap shrank to $8.4 billion from $10.2 billion in April as exports rose 1.2% and imports fell by 2.8%. The shrinkage means that trade will not be as big a drag on growth in the second quarter as it was in the first, when a wider deficit alone sapped 1.7 percentage points from real GDP growth (chart).



Almost all the May improvement was in trade with Japan. The U. S. deficit with Japan fell to $3.8 billion from $5.5 billion in April. However, Japan has already reported a wider trade surplus with the U. S. for June. That means any trade improvement for that month will have to come from other economies, in particular the developing nations of Latin America and the Pacific Rim. U. S. exports to these countries continue to grow faster than shipments to Japan and Europe.

Until the rest of the industrialized world gets back on its feet, U. S. producers will have to look homeward for growth in demand. If Greenspan is right, domestic demand will be sufficient to carry the economy into 1994. But given the Fed's renewed aggressiveness toward inflation, the U. S. had better hope Europe and Japan get their economies moving again soon, because the Fed intends to keep demand here at home on a short leash.

THE WEEK AHEAD

EMPLOYMENT COSTS

Tuesday, July 27, 8:30 a.m.
Compensation for civilian workers probably rose by 0.7% in the second quarter, according to the median forecast of economists surveyed by McGraw-Hill Inc.'s MMS International. Labor costs increased 1.2% in the first quarter, but the growth in benefits likely slowed last quarter after a 1.4% rise in the first.

CONSUMER CONFIDENCE

Tuesday, July 27, 10 a.m.
The Conference Board's index of consumer confidence likely dropped to 57.2 in July from 58.9 in June. Following Clinton's election, confidence soared to 78.1 in December. But since then, households are worrying more about job prospects and higher taxes.

DURABLE GOODS ORDERS

Wednesday, July 28, 8:30 a.m.
New orders for durable goods probably rose 1% in June. That follows declines in three consecutive months, including a 1.7% drop in May. Unfilled orders probably fell 1% after dropping 0.9% in May.

GROSS DOMESTIC PRODUCT

Thursday, July 29, 8:30 a.m.
The MMS median forecast is that the economy grew at an annual rate of 2.3% in the second quarter after a weak 0.7% rate in the first. Stronger consumer spending and business investment offset the drags from net exports and slower inventory accumulation. Also, defense rebounded a bit last quarter after plunging 26% in the first period.

NEW SINGLE-FAMILY HOME SALES

Friday, July 30, 10 a.m.
New homes likely sold at a 600,000 yearly pace in June, up from 571,000 in May. Low mortgage rates are lifting demand.

PERSONAL INCOME

Friday, July 30, 10 a.m.
Personal income was little changed in June after rising 0.6% in May. That is suggested by poor job growth and a decline in weekly nonfarm earnings. Consumer spending, however, continued to rise, probably advancing 0.5% in June after a 0.2% increase in May.

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AUGUST 2, 1993

WITHDRAWAL SYMPTOMS

DRUGMAKERS ARE WAKING UP TO A NIGHTMARE

Pharmaceuticals. For a decade or more, the word seemed almost interchangeable with "growth." The drug business was a miracle industry: While other segments of the economy restructured and retrenched, pharmaceutical labs kept churning out stunning cures for what ailed us. The strongest companies charged what they liked, and their profits grew by 25% or more a year. It looked so easy.

It was, in fact, too easy. Suddenly, the industry is scared stiff, confronted by a new order that sprang inevitably from the old. As America rushes headlong into health reform, powerful insurers, health-maintenance organizations, and other big buying groups increasingly are telling drugmakers what they're willing to pay. Hillary Rodham Clinton threatens price controls. Generic drugs are tearing into the margins of proprietary ones. New miracle cures are scarce.

"VERY ROCKY." Growth? Forget it. This industry has more prosaic concerns now, such as rethinking every aspect of how it does business. "There is going to be, for the next six to seven years, a very rocky situation for the whole industry," says Jacques F. Rejeange, president of the pharmaceuticals group at Eastman Kodak Co.'s Sterling Winthrop unit.

Drugmakers are struggling because they were late to acknowledge the market forces that drove consolidation of medical-supply companies last year, and hospitals before that. True, a few giants, such as SmithKline Beecham PLC, cut overhead when earnings faltered in the late 1980s. But only now are many companies taking a scalpel to their costs. "It's painful and tough, but I think we're doing what the rest of Corporate America has been doing," says William C. Steere Jr., chief executive of Pfizer Inc. and chairman of the Pharmaceutical Manufacturers Assn. (PMA).

Merck & Co. seems to understand now. On July 20, the much admired industry leader announced it was setting aside $775 million for restructuring charges, slashing its second-quarter net income by 73%, to $172.6 million, on an 8% sales gain. Merck is paying 2,100 of its employees to take early retirement and says it will trim hundreds more jobs as it struggles to confront an environment that Chief Executive P. Roy Vagelos calls "highly pressurized."

Merck's gloomy announcement came a day before similar tidings from Marion Merrell Dow Inc., which will take a restructuring charge of $180 million. Before that write-off, its earnings were off 20% for the quarter. In the past two years, members of the PMA have disclosed plans to cut some 23,000 jobs, or roughly 8% of their staffs worldwide. More slashing is on the way. Incoming Eli Lilly & Co. chief Randall L. Tobias ominously told analysts on July 20: "Our overhead structure evolved during a very different era. We must bring it into line with our current marketplace."

Top executives are taking the fall. Tobias replaced Vaughn D. Bryson, driven out in late June after he failed to cut overhead costs and bolster an anemic new-product pipeline. At Merck, president Richard J. Markham left abruptly on July 9 amid disputes over his ambitious plans. And at Glaxo Holdings PLC, Chief Executive Ernest Mario quit in March over "irreconcilable differences" on strategic decisions, he says, with Chairman Sir Paul Girolami.

The heads are rolling amid a broad shift of power from makers of medicines to their buyers. Managed-care organizations such as HMOs now count among their members an estimated 60 million Americans. They have leverage, and they know it. So do big hospital groups. "We're trying to give our business to the people that can help us reduce our costs," says Richard L. Scott, CEO of Columbia Hospital Corp. in Fort Worth. Columbia, whose bill for drugs and related supplies likely will rise to $900 million a year after it merges with Galen Health Care Inc. in September, plans to trim that tab by 10% or more in the next three months. "Clearly," says Scott, "buyers are in the driver's seat."

The prospect of radical reform is a chilling one for the drug industry

WAITING FOR DRUGS AT A WALGREEN'S IN FLORIDA

As the nation rushes headlong into health reform, big buying groups increasingly are telling drug companies what they're willing to pay

Ironically, drugmakers themselves have put buyers in control by chasing after too many look-alike medicines. So-called me-too drugs—virtually identical medicines that spring from corporate labs at roughly the same time—have made for plenty of price competition. Merck cut prices on its cholesterol-reducers Mevacor and Zocor this spring in the face of a cheaper rival, Bristol-Myers Squibb Co.'s Pravachol. And it's because Tagamet, the ulcer medicine from SmithKline Beecham, has undercut Glaxo's competing Zantac that prices for both are coming down.

VULNERABLE. Generic drugmakers are turning the heat up another few degrees. Of the 30 biggest-selling drugs in the U. S., 14 will be off patent by the end of 1996—a function largely of the cyclical nature of scientific discovery in the industry. That will leave about $10 billion in annual sales vulnerable to copying by generic-drug houses.

To compete, drugmakers including Merck and American Home Products have opened their own generic units, while Marion Merrell Dow has acquired clonemaker Rugby-Darby Group. But critics say such efforts promise only modest returns, while distracting research-based drug houses from their development efforts. Argues Albert I. Wertheimer, dean of the pharmacy school at Philadelphia College of Pharmacy & Science: "People are panicking."

Indeed, the big-name pharmaceutical makers have plenty to worry about in their own laboratories. Few blockbusters are on the way to take the places of the ulcer, cholesterol-reducing, and cardiovascular medicines that now generate billions of dollars in sales annually. In the early 1980s, Merck could boast of two such drugs in its pipeline. Now, it has few apparent new stars: Proscar, a much publicized prostate disease treatment, seems sure to fall far short of its billion-dollar-a-year promise. And too few breakthrough medicines are behind it. Says Mariola B. Haggar, drug analyst with Salomon Brothers Inc.: "Across the industry, we are facing a hiatus in terms of major blockbuster products."

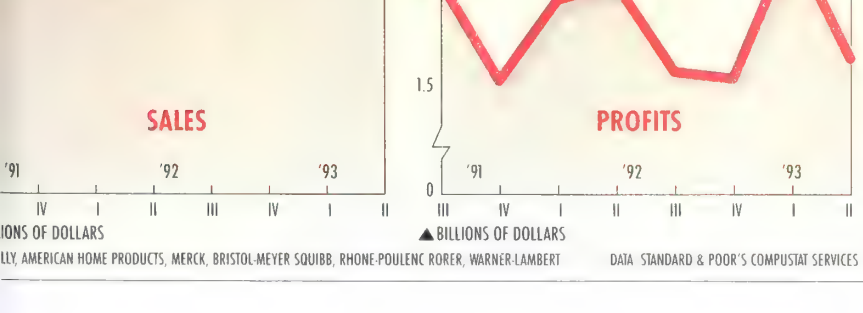
A few big drugmakers are thriving, thanks either to past cost-cutting or productive research and development. Pfizer on July 21 posted a 24% gain in net income from ongoing operations, to $584 million, in the first six months of this year. Sales of its Diflucan antifungal drug and Zoloft antidepressant are growing nicely. And SmithKline Beecham, which wrung out costs in a merger in 1989, showed a gain of 17% in profits, to $595 million, on a 23% sales rise in the half.

But even those able to brag of big gains are treading cautiously. SmithKline CEO Robert P. Bauman was cool in announcing his results. He warns: "The health-care market is becoming increasingly difficult to forecast, and the long-term impact of these pressures is not clear." It is clear, really: The next decade will be painful. Health reform likely will heighten the turmoil. And the growth and glamor of old will never come as easily again.

By Joseph Weber in Philadelphia, with Stephanie Anderson Forest in Dallas and David Greising in Chicago

DRUGMAKERS STRUGGLE

SALES AND NET PROFITS FOR SIX MAJOR DRUG COMPANIES*



LLY, AMERICAN HOME PRODUCTS, MERCK, BRISTOL-MEYER SQUIBB, RHONE-POULENC RORER, WARNER-LAMBERT

DATA STANDARD & POOR'S COMPUSTAT SERVICES

FEWER MIRACLE CURES ARE COMING OUT OF THE RESEARCH LABS THESE DAYS

(CLOCKWISE FROM BOTTOM) STILL PHOTOGRAPHS BY HALLAH FEARNY; SARA TOM; SAMUEL WOLFE; HART BRAMAR; BW

SEEKING PARTNERS FOR EDISON

Companies that may invest in Chris Whittle's for-profit schools venture

POTENTIAL PARTNERS ■ RATIONALE ■ STATUS

DISNEY May pay $500 million for a controlling stake in the Edison Project and Channel One

■ Would allow Disney to adapt Mickey and other characters for multimedia educational uses; would reach 350,000 classrooms

■ Disney is studying Whittle's financials

APPLE COMPUTER May supply computers in return for an equity stake

■ Would allow Apple to bolster its lead in the educational PC market

■ Negotiations on hold

MCDONALD'S Could operate cafeterias in Whittle schools in return for a stake

■ Would help McDonald's expand beyond mature restaurant market

■ Negotiations under way

IS DISNEY READY TO GO TO SCHOOL?

It may join up with Whittle to pioneer futuristic classrooms

Chris Whittle has scaled back his Edison Project so many times that critics were starting to wonder whether it was turning into a Mickey Mouse venture. Soon, that may be just the name for it.

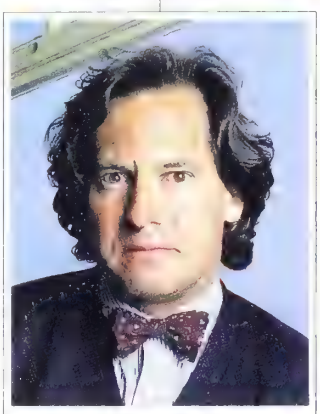
Mickey's creator, Walt Disney Co., has stepped up talks to buy control of the Edison Project, Whittle's ambitious and controversial plan to build a profit-making school system. Investment bankers familiar with the negotiations say Disney may plunk down $500 million for as much as 80% of the Edison Project and Channel One, a satellite-TV service that beams current events and commercials into nearly 12,000 schools.

TENNESSEE WALTZ. Disney and Whittle both declined comment on the talks. And observers caution that Disney has passed on such properties as the MGM/UA film studio and Sea World after similarly serious talks. But a top Disney executive confirms that the entertainment giant has sent a team of financial analysts to scour the books at the Knoxville (Tenn.) headquarters of Whittle's media and marketing company, Whittle Communications. One banker close to the company says Disney has become more interested in the venture since Whittle lowered his price from $1.3 billion in May to around $700 million now.

For Whittle, who has staked his reputation on the Edison Project, Disney may be a last hope. Whittle has been trying for months to raise $750 million to break ground for his model schools. He hired Salomon Brothers Inc. to line up prospects. But few have offered cold cash.

Whittle has been desperate enough to offer equity stakes in the project in return for products or services (table), bankers say. McDonald's Corp., for example, may run the school cafeterias, while Apple Computer Inc. could donate computers. Apple confirms that Chairman John Sculley held discussions with Whittle last winter, though Apple's troubles make a deal unlikely anytime soon. McDonald's wouldn't comment.

For Disney, hooking up with Whittle would mark a splashy entry into the evolving business of multimedia education. Disney already has more than 450 educational films in its library. And the company is pumping out 20 titles a year for the interactive laser-disk market: Jiminy Cricket takes you on an interactive tour of the human ear, for example. A Whittle deal would give Disney Chairman Michael D. Eisner access to an audience of 8 million. Says one banker: "I think Eisner is susceptible to the 'I'm out of the loop' syndrome."



CHRIS WHITTLE: DISNEY MAY BE HIS PROJECT'S LAST HOPE

SCALING BACK. Still, Disney must look before it leaps. Whittle has been downshifting ever since he lured former Yale University President Benno C. Schmidt to head the Edison Project in May, 1992. At that time, he talked about raising $1.2 billion to build 200 campuses by 1996. Then, a Whittle spokesman says he decided to take over existing public schools, which cut his investment requirements. By building fewer schools from scratch, Whittle was able to lower his capital costs from $1.2 billion to $750 million. Whittle also slashed his $60 million R&D budget by shortening his research and development period.

Whittle's spokesman claims the project is now actually a year ahead of schedule. Whittle plans to build his first schools in 1995 instead of 1996. And his shift in focus came after public-school systems expressed interest in trying the Edison model.

But there are signs that Whittle is under pressure. For one, the Disney deal would make him give up Channel One, his most successful venture. The service generates roughly $100 million a year in ad sales.

Certainly, Whittle can't bankroll the project with his other businesses, such as Special Report Network, a TV and magazine service for doctors' offices. The company's fiscal 1993 revenues will be flat at about $230 million, and profits have eroded as Whittle phases out his print-media products. This uneven performance has soured Whittle's relationship with Time Warner Inc., his largest shareholder. Executives familiar with the company say Time Inc. Chairman Reginald K. Brack Jr. is mulling over ways to reduce the 37% stake. Time Warner declined to comment.

If a deal were to happen, Disney would presumably buy out Time Warner's stake in Channel One and Edison. But Time Warner would retain 37% of Whittle's remaining assets. It's not clear how such a deal would affect Whittle's two other principal shareholders: Dutch consumer-electronics giant Philips, which owns 25%, and Britain's Associated Newspapers Holdings, which owns a 24.6% stake.

Just in case Disney doesn't buy into the Edison Project, Whittle is already placing other bets. Executives close to the company say he is developing a spin-off of Channel One to be called PE TV, which would beam fitness programs into gym classes. And he is also building a TV production arm. But unless Whittle keeps his deal with Disney alive, these projects could end up seeming a little Mickey Mouse themselves.

By Mark Landler in New York, with Ronald Grover in Los Angeles

BOARDROOM POLITICS

THESE BOARD MEMBERS AREN'T IBM-COMPATIBLE

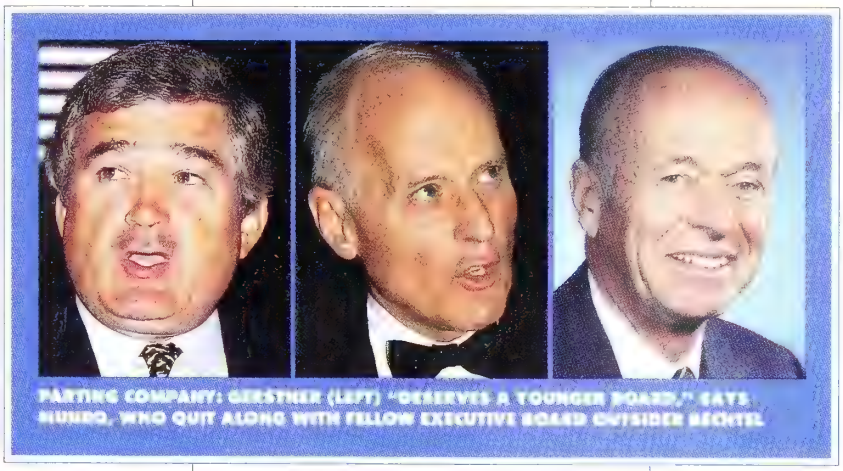
Two directors are leaving Big Blue—more could follow

The winds of change buffeting IBM's executive suites are now reaching into Big Blue's boardroom. Director J. Richard Munro—a member of IBM's powerful executive committee—won't be there when directors meet on July 27 in New York, BUSINESS WEEK has learned. Munro has resigned, citing his unfamiliarity with the computer business as one reason—a remarkable bit of candor, considering he has served on IBM's board since 1979. Stephen D. Bechtel Jr., chairman emeritus of Bechtel Group Inc.—and also on the executive panel—is quitting, too. Helmut Sihler, the former chief executive of Henkel, retired from the board in June for "personal reasons." And more IBM directors are expected to depart by spring.

Such boardroom shifts may look anticlimactic compared with last winter's events, when the ax fell on CEO John F. Akers. But IBM-watchers see the resignations as a tacit admission that the board isn't up to the task of overseeing IBM. "The business did get a little beyond us," concedes Munro, former co-CEO of Time Warner Inc. Bechtel, director since 1976, wouldn't comment.

Old-line outsiders may be quitting partly because heat from investors is growing. Angry shareholders, who have seen IBM's stock fall off a precipice, sniped at them at April's annual meeting. And the bad news keeps coming: IBM is expected to announce a second-quarter loss on July 27. Analysts predict red ink of 20¢ a share, vs. a $1.29 per share profit a year ago, according to First Call. That follows a 1992 loss of $6.9 billion on $64.5 billion in sales. IBM's stock just hit an 18-year low of 41⅝.

Louis V. Gerstner Jr., who took over from Akers in April, "went in with a mandate to change the board," says a source close to Director James E. Burke, the retired Johnson & Johnson CEO who led the search for Akers' replacement. So far, Gerstner, who previously held the top post at RJR Nabisco Inc. and the No. 2 spot at American Express Co., has focused on more pressing tasks. But he wants to compensate for his lack of in-depth knowledge of the computer industry by finding technologically savvy directors. And IBM's outsiders have been of little help. Gerstner has had to rely on insiders—former CEO John R. Opel, Vice-Chairmen Jack D. Kuehler and Paul J. Rizzo. Kuehler retires on July 30.



PARTING COMPANY: GERSTNER (LEFT) "DESERVES A YOUNGER BOARD," SAYS MUNRO, WHO QUIT ALONG WITH FELLOW EXECUTIVE BOARD OUTSIDER BECHTEL

PC REMARK. The board's deficiencies were made very clear last Feb. 23, when the four outsiders on the eight-member executive panel—Bechtel, Burke, Munro, and Thomas S. Murphy, chairman of Capital Cities/ABC Inc.—met with California Public Employees' Retirement System officials. At the 90-minute meeting, Munro said none of the directors felt comfortable using a personal computer. "Not one of us has a PC in our home or in our office," he said, according to a participant. No one disagreed.

Yet because IBM's 18-member board is too big to handle many issues effectively, the power—and key responsibility—rests with these directors. "The people on the executive committee all should have resigned," says a source close to the board. "None knew what was going on, and they all should have known."

The rest of the board hasn't exactly shone, either. It's studded with blue-chip members unlikely to challenge the status quo. Examples: Thomas F. Frist Jr., chairman of Hospital Corp. of America; John B. Slaughter, president of Occidental College; and Nannerl O. Keohane, president of Duke University. Says one outsider: "We were world-class directors five years ago, but it doesn't make sense for a Dick Munro or a Thomas Murphy to be on that board today." IBM won't comment.

Munro agrees that "requirements for boards have changed." He forecasts that more IBM directors will leave. "Directors should have limited terms and move on," he says. "I think Lou deserves a younger board. In a fast-moving technology business, you need younger legs. Lou should have the right to choose some people he knows, respects, and who are much more attuned to the industry."

Letting Gerstner pick directors would not sit well with shareholder activists: An independent nominating panel of outsiders, which IBM has, should do that. With IBM's stock sinking—and new layoffs, write-offs, and a possible dividend cut rumored on Wall Street—beefing up Big Blue's board is one of the few quick good-news signals Gerstner can send.

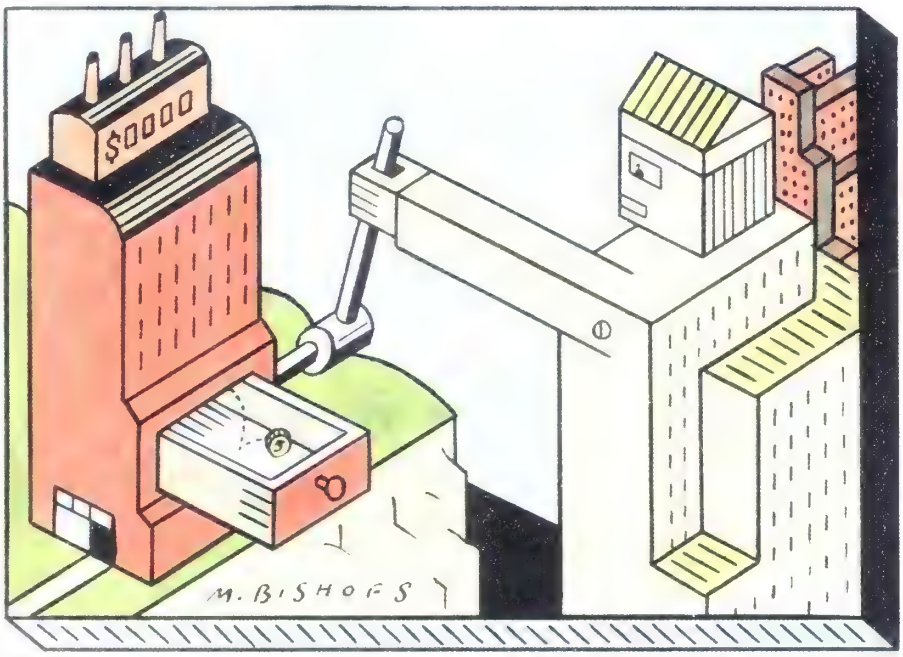
By Judith H. Dobrzynski in New York

CORPORATE PROFITS

COMPANIES ARE WRINGING MORE FROM LESS

Second-quarter profits are healthy, despite modest sales gains

Is the economy stalled? You would never know it by looking at BUSINESS WEEK's flash report of second-quarter results. Sales increased by 6%, and profits jumped 16% over a healthy year-ago quarter, thanks primarily to cost cutting. There were some turnarounds in the quarter: Sears staged a profit rally, and American Airlines' parent managed to move into the black.



	Current qtr. sales
INDUSTRIALS	**77,168.7**
ABBOTT LABORATORIES	2,073.8
ALCOA	2,405.3
BAUSCH & LOMB	479.4
BOISE CASCADE	974.0
BRISTOL-MYERS SQUIBB	2,802.4
CINCINNATI MILACRON	237.2
COCA-COLA	3,899.0
COORS (ADOLPH)	412.9
CORNING	906.8
CPC INTERNATIONAL	1,689.8
GENERAL ELECTRIC	14,761.0
GILLETTE	1,237.3
GOODRICH (B.F.)	452.7
GRUMMAN	746.2
INTERNATIONAL PAPER	3,500.0
JOHNSON & JOHNSON	3,541.0
LIZ CLAIBORNE	506.9
MARTIN MARIETTA	2,613.3
MERCK	2,573.6
MONSANTO	2,230.0
PEPSICO	5,890.3
PHILIP MORRIS	15,789.0
PPG INDUSTRIES	1,523.6
RUBBERMAID	488.5
TELEDYNE	624.4
U.S. SURGICAL	228.8
VALERO ENERGY	321.0
WEYERHAEUSER	2,387.5
WHIRLPOOL	1,873.0
SERVICES	**49,726.3**
AMERICA WEST AIRLINES	324.9
AMR	4,212.0
BARNETT BANKS	NA
CAPITAL CITIES/ABC	1,438.8
CBS	835.8
CHASE MANHATTAN	NA
CITICORP	NA
CONTINENTAL BANK	NA
DOW JONES	487.0
FANNIE MAE	3,898.5
FEDERAL EXPRESS††	2,038.7
FIRST CHICAGO	NA
GANNETT	937.8
HASBRO	515.6

DATA STANDARD & POOR'S COMPUSTAT

COMPUTERS

COMPAQ FLEXES ITS PECS

It has bloodied low-cost rivals —and now it's pressing IBM

If you thought the PC price wars of '93 were winding down, think again. Former champions Apple Computer and Dell are announcing losses in their latest quarters. Tandy Corp. has sold its personal-computer business to AST Research Inc., which has to absorb a big restructuring charge as a result. IBM claims its PC business turned a profit this quarter, but analysts don't think it made much. That leaves only one big player as a standout performer: Compaq Computer Corp., the once stumbling Texan that engineered a turnaround in one of the toughest business environments going.

In fact, Compaq is on a major roll. On July 21, the nation's No. 3 PC maker (behind IBM and Apple) reported that its sales soared 97% vs. last year's second quarter, to $1.63 billion, while earnings more than tripled, to $102 million. Shipments in that time rose a stunning 150%, to around 700,000 units, vs. an average 25% growth rate for the industry. And Compaq is the only big PC maker whose margins are rapidly rising. Net margins hit 6.26% in the second quarter, up from 3.5% in the same period last year.

How is Compaq doing it? Sales are booming largely because of a decision by Chief Executive Eckhard Pfeiffer last June to overhaul its product line and ignite a fierce price war with a slew of low-cost models. But the company ha also pulled off the difficult feat of lowe ing prices and raising margins simulta neously by squeezing fat from its onc bloated infrastructure. It doubled pro duction over the past year and now i running its three plants around th world seven days a week, 24 hours day. That gives it efficiencies of scal over rivals such as Gateway 2000 an Dell Computer Corp. that only do fina assembly of their PCs. Given its highe purchasing volume, Compaq also ex pects to save more than $400 million i materials costs this year, on top of $20 million in 1992.

BURNING FAT. Now, Pfeiffer plans t press these advantages for all they'r worth. He says his main goal is to boos market share from the current 6.5%, dis placing market leader IBM by the firs quarter of 1996. To do that, he want Compaq to offer a computer for every

nt ts	% chg.	Est. EPS (5/13)	Reported EPS	Diff.
7	**–10**	**0.77**	**0.64**	**–0.13**
1	+9	0.42	0.42	—
3	NM	0.47	0.40	–0.07
0	+15	0.79	0.78	–0.01
1	NM	–0.63	–0.72	–0.09
6	+10	1.05	1.01	–0.04
8	+111	0.21	0.18	–0.03
0	+20	0.52	0.52	—
9	+26	0.43	0.50	+0.07
8	+34	0.51	0.47	–0.04
9	+5	0.77	0.76	–0.01
0	–42	1.53	1.56*	+0.03
7	+12	0.62	0.61	–0.01
2	+389	0.41	0.33*	–0.08
8	+13	0.85	0.79	–0.06
0	–32	0.65	0.62	–0.03
0	+10	0.78	0.75	–0.03
1	–21	0.42	0.38	–0.04
1	+25	1.90	2.28	+0.38
6	–73	0.61	0.61*	—
0	+111	1.30	1.66	+0.36
2	+13	0.55	0.53	–0.02
0	–22	1.20	1.20	—
2	0	1.19	1.00	–0.19
6	+16	0.32	0.32	—
1	+9	0.24	0.15	–0.09
0	NM	0.10	–0.39	–0.49
7	–10	0.58	0.56	–0.02
5	+95	0.67	0.89	+0.22
0	+40	0.89	1.04	+0.15
1	**91**	**0.83**	**1.17**	**+0.34**
3	NM	NA	0.39	NA
0	NM	1.05	0.39	–0.66
2	+66	0.89	1.01	+0.12
9	+3	9.97	9.21	–0.76
4	+56	5.53	6.73	+1.20
0	+53	0.80	1.20	+0.40
0	+212	0.55	0.88	+0.33
0	+20	0.84	0.95	+0.11
8	–5	0.47	0.40	–0.07
6	+21	1.66	1.81	+0.15
5	+56	1.03	1.01	–0.02
5	+388	1.01	1.81	+0.80
7	+16	0.79	0.78	–0.01
2	+20	0.31	0.30	–0.01

	Current qtr. sales	% chg.	Current qtr. profits	% chg.	Est. EPS (5/13)	Reported EPS	Diff.
HUMANA	778.0	+8	19.0	NM	0.11	0.12	+0.01
MARRIOTT	2,155.0	+6	36.0	+24	0.31	0.29	–0.02
MATTEL	411.2	+2	34.0	+45	0.30	0.34	+0.04
McGRAW-HILL	490.9	+1	43.2	+17	0.85	0.88	+0.03
MERRILL LYNCH	3,968.6	+18	345.0	+53	2.22	3.05	+0.83
MORGAN (J.P.)	NA	NA	431.0	+33	1.41	2.12	+0.71
NATIONSBANK	NA	NA	306.0	+22	1.16	1.20	+0.04
OFFICE DEPOT	527.9	+36	10.9	+68	0.11	0.12	+0.01
PAINEWEBBER GROUP	954.9	+17	59.3	+30	0.92	1.11	+0.19
PRIMERICA	1,283.6	+1	186.4	+25	0.98	1.02	+0.04
ROADWAY SERVICES	939.3	+17	27.3	–16	0.73	0.69	–0.04
SAFEWAY	3,549.4	+3	36.0	+8	0.29	0.30	+0.01
SALLIE MAE	640.1	–11	106.7	+9	1.20	1.19	–0.01
SCHWAB (CHARLES)	264.6	+21	31.6	+70	0.17	0.53	+0.36
SEARS ROEBUCK	12,156.9	–4	1,093.6	433	1.01	1.51*	+0.50
TIME WARNER	3,253.0	+5	–45.0	NM	–0.10	–0.13	–0.03
UNION PACIFIC	1,848.0	+4	198.0	–4	0.95	0.96	+0.01
USAIR	1,815.8	+7	5.8	NM	0.33	–0.23	–0.56
TECHNOLOGY	**17,961.2**	**+14**	**1,127.8**	**+12**	**0.71**	**0.57**	**-0.14**
ADVANCED MICRO DEVICES	409.1	+17	64.4	+55	0.66	0.65	–0.01
APPLE COMPUTER†††	1,862.0	+7	–188.3	NM	1.01	–1.63	–2.64
BORLAND INTERNATIONAL†	123.4	+7	6.2	259	0.18	0.22	+0.04
COMPAQ COMPUTER	1,632.3	+97	102.3	253	1.15	1.21	+0.06
CONNER PERIPHERALS	490.6	–11	–58.8	NM	0.10	–1.19	–1.29
GENENTECH	159.1	+31	10.4	206	0.08	0.09	+0.01
INTEL	2,129.6	+61	568.5	167	1.27	1.30	+0.04
MOTOROLA	3,936.0	+25	224.0	+57	0.80	0.81	+0.01
POLAROID	569.9	+2	28.6	–19	0.41	0.61	+0.20
RAYTHEON	2,258.0	–3	179.3	+8	1.33	1.32	–0.01
STORAGE TECHNOLOGY	355.1	–8	1.3	–81	0.08	0.01	–0.07
UNISYS	1,927.2	–8	103.0	+17	0.38	0.44	+0.06
VLSI TECHNOLOGY	128.0	+23	3.0	NM	0.05	0.09	+0.04
WESTINGHOUSE ELECTRIC	1,981.0	–9	84.0	–18	0.24	0.20	–0.04
UTILITIES & TELECOM	**22,635.4**	**+4**	**2,318.3**	**+6**	**0.76**	**0.75**	**-0.01**
AMERICAN ELECTRIC POWER	1,210.0	+3	86.2	+16	0.47	0.47	—
AMERITECH	2,950.8	+5	389.6	+14	1.31	1.43	+0.12
BELL ATLANTIC	3,220.1	+2	385.5	+22	0.86	0.88	+0.02
COMMONWEALTH EDISON	1,430.5	0	75.1	–29	0.33	0.27	–0.06
NYNEX	3,364.3	+2	340.2	+3	1.67	1.65	–0.02
PACIFIC TELESIS	2,578.0	+3	291.0	+1	0.73	0.71	–0.02
SOUTHWESTERN BELL	2,539.3	+6	294.4	–3	0.54	0.49	–0.05
SPRINT	2,800.9	+9	165.1	+12	0.45	0.48	+0.03
US WEST	2,541.5	+4	291.2	+6	0.79	0.70	–0.09

NA = not available NM = not meaningful † First-quarter results †† Third-quarter results ††† Fourth-quarter results

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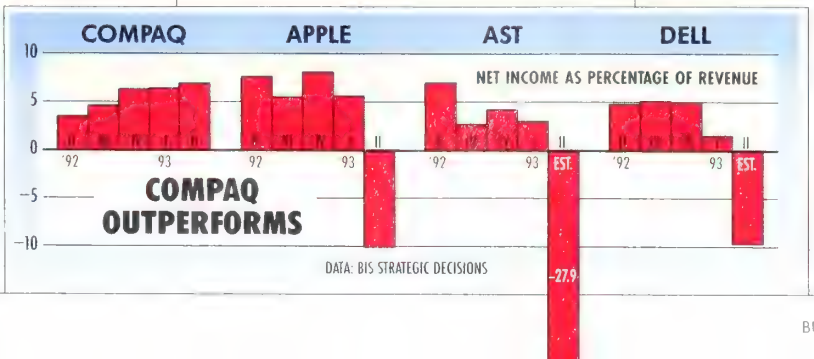
ne, everywhere. So he plans to continue ne company's push into direct mail and ass-market retailers, bolster research nd development with 200 new hires, nd introduce new products such as a andheld personal digital assistant and a uperlight portable PC. He also laid the roundwork for more growth overseas y adding three subsidiaries in Europe nd one in China. Now, he's scouting out outh America and India.

The big question: Can Pfeiffer pull all his off if demand slips? C companies expect ealthy growth in the .S. this year, but ome analysts believe hat's wishful thinking. Everything is pointing demand flattening at," says senior ana- st Randy Giusto of ork Group Technologies Inc. He just cut his estimate for second half U. S PC shipments by 20%, to 10.8 million.

Compaq, however, insists it can increase market share no matter what happens to demand, citing Europe as an example. Industry shipments there slowed in the second quarter from the first, but Compaq says its revenue grew 58% anyway. "People have been talking about saturation for eight years," says Chief Financial Officer Daryl J. White. "There's a never ending opportunity for new customers, new products, and repurchases. The treadmill continues."

Given that scenario, don't look for a truce in the price wars. David Goldstein, who runs industry watcher Channel Marketing in Dallas, expects prices to fall 25% for the year. That's a lot less than last year's 41% decline but enough to push out some of the 900 PC suppliers worldwide. Compaq says it won't be the one to start another price war. "There are better ways to leverage our position," says White. "We can do more damage in other ways." Price war or no, it sounds as if there's more skirmishing in PCs to come.

By Peter Burrows in Dallas, with bureau reports



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STRATEGIES

SANDY WEILL'S FINGERPRINTS ARE ALL OVER TRAVELERS

Primerica's stake is modest, but his input in its turnaround was huge

Edward H. Budd and Sanford I. Weill first met in 1983. Weill, newly installed atop the ailing Fireman's Fund unit of American Express Co., wanted to learn more about the insurance business. So he invited Budd, chairman and CEO of Travelers Corp., to spend the weekend with him in Boca Raton, Fla. "Sandy analyzed issues and problems quickly," Budd remembers. Says Weill: "It was a comfortable relationship from the beginning."

Ten years later, Weill and Budd are talking again—this time, about Travelers. They talk a lot. Last Sept. 21, Weill's Primerica Corp. put up $722.5 million for a 27% stake in troubled Travelers. Now, Budd's company is turning around—and Weill's fingerprints are all over the rebound. "I don't think any decision on Travelers' future is reached without discussions with Primerica," says Lawrence G. Mayewski, senior vice-president at A. M. Best Co., the insurance rating agency.

Travelers has shed 3,300 jobs since June, 1992, and plans to cut 1,700 more by the end of 1994. It has shut down the executive dining room and sold the corporate jet (but kept a helicopter). It's evaluating all its businesses and is set to exit its index-fund operation, which accounted for $2.6 billion of the $17 billion of assets under Travelers' management.

LOOKING UP. The result: After three years of so-so to poor performance, Travelers on July 19 reported a 40% gain in net profits, to $93 million, for its second quarter. Analysts raised estimates of 1993 profits from $1.76 to $2 a share. And Travelers stock jumped to 31⅜, up 79% since Weill bought in. That's a $571 million profit for Primerica.

Travelers started the restructuring on its own. And it was Budd who went searching for an outside investor. Although Travelers' core insurance operations were sound, underperforming mortgage loans and souring real estate had topped $5 billion. The company's $658 million loss last year included a $485 million addition to real estate loss reserves. At one point, Budd even considered selling Travelers.

Instead, he found Weill. Primerica's boss isn't wielding the draconian blade many expected. But Primerica Vice Chairman Robert I. Lipp, appointed to oversee the Travelers investment spends two days a week at the insurer. Another Primerica executive, Frank G. Zarb, was named to Travelers' operating committee—giving Primerica five members to Travelers' four.

Weill says Budd still calls the shots and others play down the committee's preeminence. But Weill admits he's pressuring Travelers to sell at least $600 million of its problem real estate this year—twice what was sold in 1992.

TESTING, TESTING. Travelers has sold just $100 million worth of assets so far this year, but it predicts an uptick in sales in the second half. There had better be. "Right now, they know the big issue is real estate," says A. M. Best's Mayewski. The weak property portfolio has kept Mayewski and other credit raters from upgrading the insurer. Best has given the company's insurance operations a grade of A-. That, in turn, has hurt Travelers' ability to attract investment assets. Its assets under management dropped to $17.1 billion on June 30, down from $18.8 billion a year earlier.

Weill also wants to combine more of Travelers' operations with Primerica's. The companies plan to push Travelers variable annuities and life insurance policies through Primerica's network of 10,900 Smith Barney Shearson Inc. brokers. Commercial Credit Co., Primerica's consumer finance company, is testing the sale of Travelers home insurance to customers in Indiana. And Shearson mutual funds may someday be sold by Travelers agents. "There are lots of ideas for distribution of Travelers products through Primerica's distribution system, and vice versa," Lipp says.

Travelers and Primerica must still rationalize their overlapping insurance empires. One thing they won't do is combine any of Travelers' operations with those of Primerica Financial Services, formerly the A. L. Williams Life Insurance Co., which serves lower-income consumers. Whatever they do, expect Sandy Weill to be in the thick of the decision-making. Budd may have the last word, but he still talks to Weill. A lot.

By Chris Roush in Greenwich, Conn., with Leah Nathans Spiro in New York

BUDD AND WEILL: "A COMFORTABLE RELATIONSHIP"

TRAVELERS' CHECKLIST

Primerica bought 27% of Travelers Corp. on Sept. 21, 1992. Here's a progress report:

DONE	TO DO
☑ Cut 10% of work force	☐ Take action on $5 billion in bad real estate investments—$100 million of assets have been sold
☑ Shut down unprofitable $2.6 billion index-fund business	☐ Sell Travelers products through Smith Barney brokers and Commercial Credit offices
☑ Mothballed executive dining room; sold corporate jet	☐ Win credit upgrades from ratings agencies
☑ Lifted stock price to $31.87 on July 20, from $17.50 at acquisition	

DATA: BUSINESS WEEK

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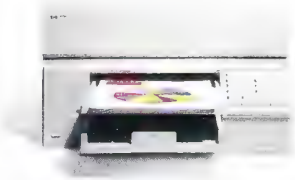
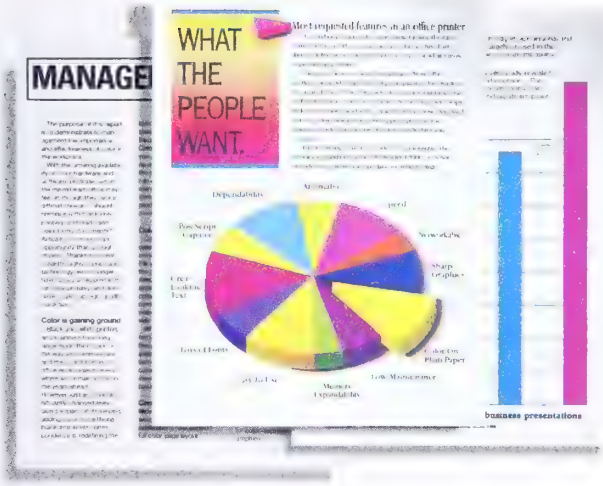
Populist.





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LABOR

LABOR DEALS THAT OFFER A BREAK FROM 'US VS. THEM'

Give-and-take pacts with steel and airline unions stress cooperation

Employee empowerment. It's a management catchphrase encompassing everything from work teams to employee ownership of corporate stock. Until recently, many big companies wanted it in their union contracts—but only if labor didn't gain real clout. Now, however, some big companies are poised to give the concept new oomph.

Over the past few months, a spate of new deals in the airline and steel industries has given unions unprecedented power (table). Contracts at Inland Steel, LTV, Northwest Airlines, and TWA have set up formal mechanisms for worker input along the lines of those heralded at General Motors' Saturn Corp. In some cases, employees also stand to exercise significant control over key aspects of corporate decision-making, such as capital investment, mergers, asset sales, and even hiring senior management. Contends William Compton, head of the Air Line Pilots Assn. local at Trans World Airlines Inc.: "We are forging the workplace of the future."

Now, the Big Kahuna in Washington is planning to add momentum to the trend. On July 26, more than 300 corporate executives, labor leaders, and academics will gather in Chicago at the behest of President Clinton to discuss this very topic: the future of the American workplace. The conference, which will be led by Labor Secretary Robert B. Reich and Commerce Secretary Ronald H. Brown, will showcase companies that have adopted the cooperative approach the President favors.

BEST SEATS. In the meantime, the airlines are breaking new ground. As TWA struggled through Chapter 11 bankruptcy last summer, its unions agreed to $660 million in concessions in exchange for 45% of the company's equity. They got 4 of the 15 board seats and the right to name one of two vice-chairmen. Labor also played a key role in the recent selection of former Piedmont Aviation Inc. President William R. Howard to be TWA's CEO. The unions' clout extends far beyond the formal structures. Compton says he talks at least three times a week with TWA senior managers to iron out problems and get updates on the carrier's finances. And employee committees meet with TWA executives to discuss ways to cut costs and boost productivity.

Northwest is now following TWA's lead. Northwest won a tentative agreement from its unions in early July to swap $886 million in wage concessions for up to 37.5% of the company's equity, plus three board seats. Labor's actual control will go much further: Northwest agreed that 5 votes of the 15 board members could block most major corporate decisions, including asset sales, financing plans, or bankruptcy filings. The union assumes that its representatives can make alliances with others on the board to defeat moves it opposes.

Similar deals may be in the works at other major carriers. On July 16, unions at United Airlines Inc. presented the company's lawyers with a package that offers $3.36 billion in wage and benefit cuts over five years. Pilots, for instance, would take an 11.9% pay cut. In return, the unions want up to 60% of the carrier's equity. Current shareholders would get cash, debt, and stock for their shares. Although United is financially sound, employees worry that it could get into trouble if Northwest gains a big edge in costs. Moreover, adds one participant in the talks, "it's a question of how much control labor should have."

HOW FAR? Steel unions are also gaining deeper involvement in company affairs. Pacts at LTV and Inland Steel gave workers or their representatives seats on the board, profit sharing, and strong job-security guarantees in return for simpler work rules and job reductions through attrition. While not as extensive as those at the airlines, the deals give employees some say over how the companies realign themselves to become more competitive. Says United Steelworkers negotiator Jack Parton: "We ain't going to survive by fighting every three years."

How far will the trend go? Clinton has argued that the U. S. must adopt European-style labor-management cooperation to succeed globally. That hasn't happened yet, but the shift toward more cooperation is gaining momentum in the U. S. That means "employee empowerment" is one catchphrase that isn't likely to lose its resonance any time soon.

By Kevin Kelly in Chicago and Aaron Bernstein in New York, with bureau reports

At Inland Steel: Profit sharing and job-security guarantees

WHERE LABOR IS GAINING CLOUT

INLAND STEEL Recently agreed that the union could nominate a board member and that union officers can attend executive meetings and meet regularly with department managers

LTV A labor/management steering committee now oversees new technology, and labor won an extensive new training program

NORTHWEST AIRLINES If the machinists vote yes, labor may have potential veto power over most investments, management changes, and any bankruptcy, breakup, or asset sell-offs

UNITED AIRLINES Labor proposes to give $3.4 billion in concessions over five years for up to 60% of the company's stock, plus significant control over big decisions

DATA: BUSINESS WEEK

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INVESTIGATIONS

AGAIN, THE FTC BEGS TO DITHER

It hasn't charged Microsoft, but it won't drop the probe, either

The air at the July 16 meeting was frosty. On one side of a table at the Federal Trade Commission was William H. Gates III, the billionaire chairman of Microsoft Corp., for three years the target of an antitrust investigation. On the other sat Commissioner Mary L. Azcuenaga, the potential swing vote in any decision to pursue the affair. Azcuenaga listened quietly as Gates argued that she should leave his company alone. When it was over, nobody had any idea how the chips might fall. "She held her cards close to the vest," says one person familiar with the meeting.

There's no answer yet. At a nonpublic meeting on July 21, the commissioners deadlocked 2-2 on whether to file antitrust charges against Microsoft, with Azcuenaga voting against. Neither could they decide to drop the case, FTC insiders say. Just a week earlier, the commission dropped its investigation of Intel Corp. following a two-year investigation. Says one FTC attorney: "There are a lot of people who are embarrassed they couldn't decide and get on with it."

DE FACTO DECISION. The latest nonaction effectively means a victory for Microsoft, one commissioner said afterward, given that the status quo will be maintained. Indeed, the case appears caught in terminal gridlock: The commissioners' last meeting on the matter, in February, ended with the same result. In the months that followed, they dithered over taking up the matter again.

There is still a chance that the case may make its way to the Justice Dept.'s antitrust division. That would be fine with Microsoft's rivals, which have hustled to keep the matter center stage. Novell Inc. hired former FTC General Counsel Michael N. Sohn, who is highly regarded by commission staffers. And Novell and others have encouraged Representative Jack Brooks (D-Tex.) to hold hearings on the issue of competitiveness in software. "There are ways that nongovernmental people have involved themselves in this process that are amazing and inappropriate," says Gates. To those involved in the case, what seems most inappropriate is the FTC's inability to make a decision.

By Mark Lewyn in Washington, with Richard Brandt in San Francisco

Commentary/by Owen Ullmann

HOW LONG CAN THE FED STEER WITHOUT A MAP?

It was a startling admission for a Federal Reserve chairman. In congressional testimony on July 20, Alan Greenspan admitted that the central bank no longer has any reliable guide to future economic growth and prices. In effect, the Fed is now flying blind as it wrestles with whether to nudge up interest rates to prevent an acceleration of inflation.

Is that cause for alarm? Greenspan has a reputation as a good seat-of-the-pants pilot, but he's not perfect. In 1990, he promised to bring an economy running out of fuel to a "soft landing." Instead, we got the 1990-91 recession.

Greenspan deserves credit for abandoning money-supply growth targets: M2 is no longer a good forecast tool, since it doesn't count the money pouring into stocks, bonds, and mutual funds.

The problem is, the Fed hasn't found a replacement. True, the central bank has always relied on instinct. But policymakers want a benchmark to gauge their course, and the financial markets need a standard for judging monetary policy.

Greenspan needs an objective measure of price pressures

HOT DEBATE. No wonder opinions are so divided about the course of interest rates. For every forecaster who wants the Fed to ease in the face of soggy growth and stable prices, there is an economist convinced that inflation lurks and the Fed should tighten. "The Fed needs to produce a targeting mechanism that answers the question 'How you gonna fight inflation?' or it risks a decline in market confidence," warns Lawrence A. Kudlow, chief economist at Bear, Stearns & Co.

So, Greenspan's staff is searching for an objective measure that will predict price pressures. "We need something well in advance so the actions we take to suppress incipient inflation can be very modest," he told a House Banking subcommittee. "We don't want the surging inflationary instabilities that occurred in the past, which required draconian action."

Greenspan's prose masks a raging debate within the Fed about the inflation outlook. Hawks, such as Governor Wayne D. Angell, believe the Fed should start tightening immediately. Others, including Philadelphia Fed President Edward G. Boehne, say weak growth and recent price moderation argue against higher rates. The Clinton Administration and many private economists, noting the sorry state of industrial economies around the world, think the Fed should provide a shot of monetary stimulus. Greenspan clearly is prepared to tighten, but he's not sure when (page 17).

GUESSWORK. That's why he really needs a new crystal ball. Greenspan suggests that the new guidepost might be "real" interest rates—that is, nominal rates adjusted for inflation. But he admits that it would be a tricky calculation, because it would require guesswork about inflationary expectations of long-term lenders. Angell wants to use the prices of gold and a basket of other commodities as an advance warning system. But Greenspan, who thinks commodity prices aren't a broad enough measure, opposes the idea.

Lacking any clear evidence of worsening inflation, Greenspan seems to be following the right flight path. But because he can't see beyond the horizon, he'll have to respond very quickly if it turns out that price pressures are growing. Otherwise, hypersensitive financial markets might grab the controls away from the Fed, sending long rates soaring, and force the economy into a spiral.

Ullmann watches the Fed from BUSINESS WEEK*'s Washington bureau.*

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EDITED BY JULIE TILSNER

MAYBE WE ALL DESERVE RAISES

Summer: That time when an overtaxed U.S. worker's thoughts turn to Europe. Or Asia. Or anywhere. Fact is, Americans don't get much time off compared to the rest of the world. Here are total vacation, holidays, and personal days taken annually by manufacturing production workers:

	DAYS OFF	HOURS WORKED
GERMANY	42.5	1,648
KOREA	39.0	1,946
ITALY	37.5	1,780
FRANCE*	36.0	1,755
SWEDEN*	36.0	1,800
JAPAN	31.0	1,861
U.S.	22.0	1,904

*1990 data, all other countries, 1991 data

GM'S SOLUTION: KEEP ON TRUCKIN'

▶ Why, one might ask, would these people want to buy another GM truck? On July 19, General Motors took a big step toward clearing away 36 class actions from owners of its 1973-87 C/K full-size pickup trucks with sidesaddle gas tanks—the ones critics say tend to burst into flames in a side collision. GM's proposal: Issue $1,000 certificates good toward the purchase of any GM light truck to the 6 million or so current owners of old models. That offer is subject to court approval, and GM still faces efforts by federal regulators to recall the pickups, as well as lawsuits involving those killed or injured in fires. How much money General Motors makes or loses on the offer depends on how heavily the certificates are used and whether they spur purchases that weren't already planned.

WHERE WILL YOU BE IN 2093?

▶ By the year 2093, they may have to wheel out Mickey Mouse in a wheelchair. But Walt Disney Co. expects to still be kicking: The Burbank (Calif.) entertainment giant intends to issue the first 100-year bonds sold since 1954—the year before Disneyland opened. Taking advantage of investors' rush to higher interest rates in a lackluster economy, Disney is expected to price the $150 million in 100-year notes at 7.5% and market them to pension funds and other long-term players. Whether the bonds will still be around a century hence is another story. Disney frequently reshuffles its debt, and in February redeemed $1 billion in zero-coupon bonds it had issued only two years earlier.

A REUNION IN MACY'S EXECUTIVE SUITE

▶ An old retailing hand may be back in the saddle. R. H. Macy, operating under bankruptcy protection since early 1992, is about to hire Michael Steinberg as CEO of its troubled $2.5 billion Macy's West division, pending approval by its creditors. Steinberg, 64, who retired as chairman of Foley's in Houston in February, couldn't be reached, and Macy's declined to comment. Steinberg probably knows what he's getting into. A friend and onetime mentor to Macy's CEO Myron Ullman III, Steinberg's office was next to Ullman's when the two worked for the Sanger Harris chain in the early '80s.

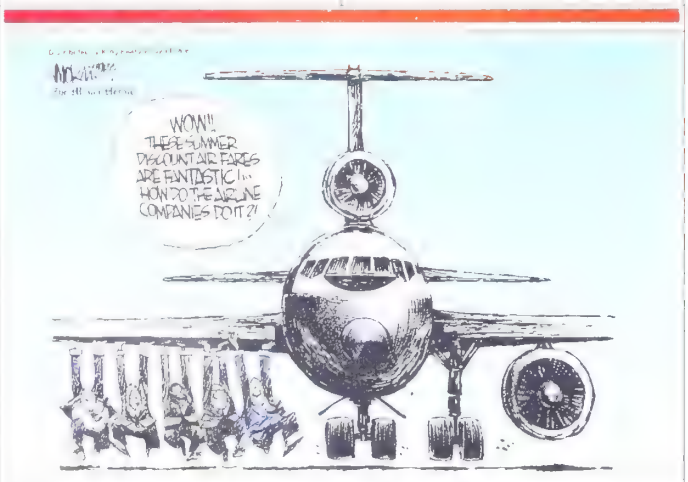
SANDBAGGED BY THE DELUGE

LOTSA SAND, LITTLE PROFIT

Amid the flooded homes and ruined businesses in the Midwest, at least one industry is thriving: the sand supply business. In St. Louis alone, officials estimate, 850,000 sandbags have been tossed and stacked to stave off Mother Nature's watery assault. Lake County, S. D., has used 45,000 bags, and Dane County, Wis., has gone through some 70,000. In hard-hit Des Moines, the number is staggering: 1.5 million bags. That's 30,000 tons of the stuff—nearly 2,000 truckloads.

But there's no windfall with the rainfall. Steady precipitation over seven weeks has interrupted construction, shutting down many regular buyers. Besides, at between $2 and $4 a ton, plus transport, sand is not exactly a high-margin item. Tim Mallicoat, division manager of Hallett Materials Inc. in Des Moines, reports that 1993 sales are down 25% from last year. Hallett sold more sand in four days at the Mississippi River's crest than it did during any month prior to the flood. But "the big picture is still bad," Mallicoat says. "I'd much rather have last spring."

When the water finally recedes, some local governments likely will recycle the sand, sans bags, for projects postponed in the spring. Some suppliers worry that will create a slump in new-sand demand. Maybe they ought to think about expanding into the topsoil business.



BRAND NAMES BUCKLE UNDER

▶ More evidence that branded goods aren't what they used to be. On July 21, Philip Morris confirmed that it would stick with the 40¢-a-pack discount on its flagship Marlboro cigarettes. In fact it's applying the cut, announced two months ago as a limited-time measure, to all its premium-priced cigarettes. A few days before Procter & Gamble announced cuts of 13,000 jobs, or 12% of the company's work force, Chairman Ed Artzt, announcing the cuts and a $1.5 billion aftertax earnings charge at a rare meeting with financial analysts, said P&G must bring out new products faster and must respond to consumers' increasing demand for value. The plan to lay off workers didn't impress investors, who knocked the stock down 2¾ to close at 49¾ on July 21.

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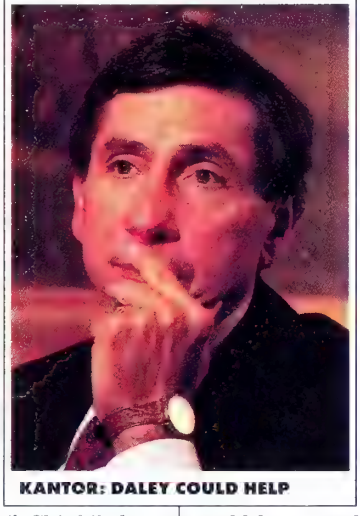
EDITED BY STEPHEN H. WILDSTROM

CLINTON PICKS AN UNLIKELY SOLDIER FOR THE TRADE WARS

With his budget nearing passage, the key challenge now facing Bill Clinton is pushing the North American Free Trade Agreement through Congress. That makes it all the more puzzling why Clinton is offering the job of chief NAFTA salesman to William Daley, a veteran Chicago pol with little Washington experience. The choice may solve a political problem for Clinton, but many NAFTA supporters doubt whether Daley is the best man to win approval for the troubled pact.

Daley, who ran Clinton's Illinois campaign, has been in a snit ever since he was passed over for the job he really wanted: Transportation Secretary. When he lost out to Federico Peña, the White House dangled other posts, but Daley told the *Chicago Tribune*: "I was interested in one job, and I didn't get it. The rest is all B. S." Meanwhile, brother Richard has criticized Clinton for reneging on promises and letting down political allies.



KANTOR: DALEY COULD HELP

BRUISED EGO. If Daley, the son of legendary Chicago Mayor Richard J. Daley and brother of current Mayor Richard M., comes aboard, he'd step into the middle of an ongoing Administration struggle over trade strategy. U. S. Trade Representative Mickey Kantor, a longtime California pol, is stocking his shop with political hands. Economic advisers, however, fear that Kantor risks giving up too much to entrenched opponents of trade liberalization. That's why National Economic Council Chief Robert E. Rubin and Treasury Secretary Lloyd M. Bentsen put Rubin's deputy, W. Bowman Cutter, in charge of U. S.-Japan trade talks rather than Kantor.

Daley has been reluctant to enlist in the trade wars. Earlier, he stiffed an offer to become ambassador to the General Agreement on Tariffs & Trade. But White House Chief of Staff Thomas F. (Mack) McLarty III accomplished two things by persuading Daley to consider the NAFTA job. His courtship assuaged the bruised egos of both Daleys. And McLarty eased fears among NAFTA backers on Capitol Hill that the lobbying task was too big for Kantor to handle. NEC chief Rubin says the Administration has plenty of econo-pundits to make the intellectual case for NAFTA. "What we need," he says, "is somebody to act as a campaign manager."

To be sure, Daley's knowledge of Chicago's wards is impressive, but NAFTA poses challenges beyond his experience. Republicans, who are ideologically committed to free trade, generally support the pact but have little enthusiasm for handing Clinton a major victory. Democrats are deeply split. Pro-union, urban liberals probably will oppose the deal under any circumstances. A large swing group is holding to see what sort of side agreements the White House comes up with on worker and environmental protection.

Given this ticklish task, NAFTA boosters think the coordinator's post should have gone to a veteran Washington hand. "I'm befuddled," fumes a Democratic strategist close to Clinton. "How does this appointment help NAFTA?" Daley's defenders reply that while he may not have put in many laps around the Beltway, it would be wrong to sell him short. Citing Daley's long involvement in Presidential politics, Chicago consultant Don Rose says: "It's not like he's just in from the provinces. If his job is to be a schmoozer, he could be a good choice." Daley, for his part, says he intends to use his political contacts to "build support for NAFTA outside Washington."

Daley clearly has his work cut out for him. Until now, the debate about NAFTA has been dominated by talk of lost jobs and falling wages. If Bill Daley can come up with an argument for the pact that can be understood in a Chicago tavern, he'll go a long way toward shifting the debate in Clinton's favor.

By Douglas Harbrecht, with David Greising in Chicago

CAPITAL WRAPUP

THE HOUSE

House Democratic leaders are scrambling to cope with the fallout if, as seems increasingly likely, Ways & Means Committee Chairman Dan Rostenkowski (D-Ill.) is indicted in the House post office scandal. Under House rules, ranking Democrat Sam Gibbons (D-Fla.) would become interim chairman pending Rosty's trial, and the leadership is worried that the quirky, 73-year-old Gibbons isn't up to the crucial job. The biggest fear is that Gibbons, an uncompromising free-trader, lacks the finesse to get the North American Free Trade Agreement through the House. One option under discussion is setting up a sort of collective leadership for the crucial panel. Gibbons would wield the gavel, but senior members including J. J. Pickle (D-Tex.) and Charles B. Rangel (D-N.Y.) would be the powers behind the throne. According to one Ways & Means source, some Democratic leaders were spooked recently at a closed-door session when Gibbons sidestepped detailed questions about the politically sensitive budget bill and instead plugged the merits of one of his pet notions, a value-added tax. Liberals, meanwhile, fret that Gibbons is too close to business lobbyists and too unpredictable to be a reliable member of the House leadership team.

ENVIRONMENT

Developers are unhappy about environmental groups' plans to go into the golf business on South Carolina's Kiawah Island. A 1990 law gives conservation groups first refusal on "environmentally sensitive" properties about to be sold by the Resolution Trust Corp. Three groups have put dibs on Kiawah's Ocean Course, which borders 51 acres of fragile wetlands. One group hopes to minimize environmental impact by turning the public facility into a private club. Some RTC officials think they might have gotten a better price by packaging Ocean with other Kiawah courses.

CAP FISHER

A NEW JAPAN?

MAYBE, BUT IT WON'T BE THE ONE THE WEST WANTS

It seems more like Italy than Japan. Days after national elections on July 18, the leaders of nine Japanese political parties are embroiled in fervid backroom maneuvering to forge a new government. There is a frenzy of media speculation over the likelihood of a government run by the long-ruling but nowhobbling Liberal Democratic Party or one patched together by remaining parties. Japan hasn't known this kind of political fluidity since the LDP began 38 years of uninterrupted rule in 1955.

Just who heads Japan won't be clear until early August. That's when the new Diet will convene to elect a Prime Minister. Current betting is that it will be an LDP man, perhaps Justice Minister and Deputy Prime Minister Masaharu Gotoda, 78, a champion of political reform. No one rules out the possibility of an opposition coalition assuming power, however. Its Prime Minister most likely would be former Finance Minister Tsutomu Hata, co-leader of the recent LDP-breakaway Renewal Party. The LDP now holds 227 seats, 29 short of a majority in the 511-seat Diet's lower house.

Whether the new government is run by the LDP or others, however, don't look for sudden shifts in Japanese policy or international behavior. Rather than shattering an established order, the Jap anese elected a more thoroughly con servative Diet than at any time sinc World War II. Because several indepen dents returned to the LDP's fold afte the election, the party did not actuall lose any seats. It was the Japan Socia ist Party that suffered the most grievou blows, losing 64 seats to parties led b former LDP men. That humiliation spel the almost certain demise of what wa once a major opposition party.

STEADY MARKETS. So despite what ap pears to be Italian-style chaos, the gov ernment that emerges from this ste of conservative parties will continu most of the economic, diplo matic, and social policies Ja pan has pursued for decade "It doesn't really matter wh runs the next government says Michio Nakajima, pres dent of Citizen Watch C "There won't be that muc change. Japanese people don have that mentality." Th markets agree. The Nikk stock average has hel steady, and the yen ha strengthened since July 18.

That's not to say the ele tion lacked significance. Mo observers believe that it si nals the beginning of a slov subtle shift that will lead to Japan that's diplomaticall more activist, economicall more efficient, and sociall more consumerist. Mayb even politically less corrup Western misperceptions t the contrary, Japan's politic restructuring could ultimatel yield a stronger nation.

It could also mean a shar ening of U. S.-Japanese ec nomic friction as Japan trade surpluses continue t mount. Even though the Clin ton Administration is hailing

TSUTOMU HATA

NOW CO-LEADER OF THE BREAKAWAY, AND SURPRISINGLY SUCCESSFUL RENEWAL PARTY, THE FORMER LDP HEAVYWEIGHT HAS CALLED FOR REINING IN THE BUREAUCRATS

MORIHIRO HOSOKAWA

A FORMER PREFECTURAL GOVERNOR, THE LEADER OF THE POPULAR AND CONSERVATIVE JAPAN NEW PARTY IS A VOCAL CRITIC OF RIGID JAPANESE GOVERNMENT CENTRALIZATION

so-called "framework" for negotiating with Japan, the coming period of political jockeying could make any market-opening talks more frustrating than ever. With politicians weakened, "the bureaucracy will take much more power than before," says Taichi Sakaiya, a former official at the Ministry of International Trade & Industry and author of the book *What Is Japan?* "That means the U. S.-Japanese relationship will become even rockier."

CLEANING HOUSE. Rather than responding to external demands for open markets, the overwhelming preoccupation of Japan's leaders will be internal political reform. The new government's paramount task will be to redraw multiple-member electoral districts that currently give rural voters wildly disproportionate power and foster LDP corruption. Failure to accomplish this goal sparked the no-confidence vote against Prime Minister Kiichi Miyazawa in June that forced the election and the modest splintering of the LDP.

According to the most widely accepted scenario, a reform package that leads to redistricting will be implemented within a year. Then another general election would follow, which many believe will yield two major conservative parties: some version of the current LDP vs. an amalgamation of new conservative forces. For the first time since the mid-1950s, Japan would have a true two-party system promising the possibility of occasional changes in government.

That doesn't necessarily mean consumers' interests will become supreme. In fact, one implication of a two-party system is that big business would no longer be hostage to an LDP bent on protecting shopkeepers and farmers. During the cold war, with the Socialists as the major opposition, business had no choice but to fund the LDP. But with two contending conservative parties, its options would increase. "It wouldn't have to concede as much on things like the irrational distribution system, overregulation, agricultural subsidies, and protectionism," says Kent E. Calder, director of the Center for U. S.-Japan Relations at Princeton University.

If that's true, a two-party system might actually create a better environment for business. "There will be more chance for freer business activities in Japan," says Hiroo Kinoshita, an executive vice-president at Sumitomo Corp.

Likewise, even if political leaders are eventually able to gain influence over powerful bureaucrats, the net result might be a more rational economic order. Members of the popular and conservative Japan New Party are vociferous critics of centralization and bureaucratic zeal. Leader Morihiro Hosokawa, a former prefectural governor now elected to the Diet, loves to tell of his one-time desire to move a bus stop several feet in southern Kumamoto Prefecture. Despite being governor, he had to get approval from the Transport Ministry in distant Tokyo. By advocating decentralization, Hosokawa's goal is to create a better life for average Japanese, not force a breakup of Japan Inc.

How soon any of these potential changes occur hinges on whether—or if—the new parties manage to wrest power from the LDP. It won't be easy. "The LDP remains the single strongest party in Japan," notes Gerald L. Curtis, a Japanese politics specialist at Columbia University. "They have their hands on a system of pork-barrel projects that gives them great power."

MODERNIZATION. Such experts believe that if the LDP is smart, it will put forward a reformer such as Gotoda or former Prime Minister Toshiki Kaifu. Then if an LDP-led coalition accomplishes its long-sought goal of political reform, the party could prolong its rule. "Lots of people have lost money betting against the LDP over the years," notes a veteran Western observer.

Whether the LDP manages to hang on or not, the new political forces at play in Japan will create change—but not the kind of change that the outside world has hoped for. It won't become a weaker, more pliable country. Instead, the Japanese goal is a stronger, better nation. For years, political scientists have decried the failure of Japan's "premodern" politics to keep pace with its world-class economy and sophisticated society. At long last, it appears, the political system is catching up with the times and listening to its people.

By Robert Neff in Tokyo

KIICHI MIYAZAWA

THE PRIME MINISTER IS ON HIS WAY OUT, BUT HIS PARTY COULD MANAGE TO HANG ONTO POWER BY FORMING A COALITION GOVERNMENT WITH ONE OF JAPAN'S SMALLER PARTIES

RUSSIA

AT THE FOREIGN-AUTO SHOW, CAR-LOVING MUSCOVITES ADMIRE A SHINY MERCEDES 300E

BMW, MERCEDES, ROLLS-ROYCE—COULD THIS BE RUSSIA?

Moscow's newly rich *biznezmen* are going ape over foreign luxury cars

The mid-July opening night in Moscow had it all. Women in low-cut dresses accompanied by duded-up men, some wearing bright pink sports jackets, strode through the glare of a dozen television cameras. Passing two beefy security guards dressed in camouflage paratrooper uniforms, they entered the showroom. There, as a jazz band blared Dixieland, guests sipped cocktails and admired several shiny sedans whose average sticker price is $200,000. Welcome to Russia's first Rolls-Royce showroom.

Rolls-Royce PLC has lots of company. All of a sudden, many of the world's top auto makers are rushing to get a parking place in Russia. It's both a testimony to the flood of hard money that's now washing around the country and a bet that somewhere down the road Russia will become a major market for cars. For now, the key buyers are Russia's newly rich *biznezmen*, a small group of wheeler-dealers who often operate in dollars. For them, conspicuous consumption is in, and nothing tops a fancy car.

On that scale, a Rolls should score high. Peter G. Terian, the Long Island car dealer who with two partners established the Rolls franchise, visited Moscow last September, did some primitive market research by standing on a street corner, and was awestruck by the number of luxury cars rolling by. "We saw so many Mercedes, but no one was selling Rolls," he says. During his first year, Terian expects to sell two dozen Rollses and Bentleys at prices ranging from $145,000 to more than $300,000. The buyers? "Entrepreneurs, people importing and exporting metals, oil, chemicals, minerals—whatever," he says.

MERCEDES IN MINSK. As Terian's research indicated, Mercedes-Benz is an established player in Russia. Five years ago, it was selling just 70 new cars a year there, mostly to foreign diplomats. But sales spurted to 3,500 last year, mostly to Russian citizens. The company now has at least 15 dealerships from Minsk to Kazan, with three in Moscow alone. Sales are small compared with those in the U. S., but "Russia is still the fastest-growing market in all the world for Mercedes," says Joachim Tränkle, head of Mercedes-Benz in Moscow.

> The buyers? Entrepreneurs, importers and exporters of metals, oil, chemicals...

Mercedes hardly has the streets to it self. BMW now has three Moscow dealer ships and expects Bimmer sales to jum from 500 in 1992 to about 700 this yea Volvo also has a strong presence, an Ford, Jeep/Eagle, and Nissan are mak ing inroads.

There's more to come. While Roll was having its grand opening, other ca makers were showing their wares at on of Moscow's first foreign-car shows Throngs of Muscovites, some totin camcorders, paid the 200-ruble (20¢) tick et price to ogle the latest models fro South Korea's Hyundai and Kia, Germa ny's Volkswagen, and the Czech Repub lic's Skoda. Some dealers even racked u sales. One Russian toted a suitcase tha was crammed with nearly 30,000 Ge man marks and closed a deal on a ne VW Golf.

There are limits to sales of new fo eign cars. The biggest problem is an ex orbitant package of Russian taxes an import levies that totals 87.5% of th sticker price. A Mercedes that sells fo $60,000 in Germany goes for $112,500 i Russia. "These customs regulations ar ridiculous," says Tränkle. Some dealers such as Rolls, are trying to get aroun the stiff levies by arranging the pape work so that individuals are selling an buying the cars. The fees and taxes o such deals are much lower than thos done by companies.

FEW MECHANICS. Parts are expensive an scarce, and service is limited. In re sponse, foreign carmakers such as Au and Nissan are opening their own se vice centers. Also, foreign companies o ten have difficulty finding capable loc partners. "We have many offers fro Russians to open more dealerships, says Horst Liesener, general director o Gewika Autoservice, which operate Moscow's three BMW dealerships. "Bu when you look at them, there's reall nothing much to them. They want t make money very easy and very fast."

Selling cars can have a violent side too. On July 19, four people were slai when a dealership that sells Alfa R meos, Jeeps, and Range Rovers was ma chine-gunned. The assailants were alleg edly seeking revenge because the deale had refused to pay prote tion money.

Despite the problems, th carmakers figure they nee to win some sales now. It' an important headstart fo the day when Russia' economy turns around an they can really cash in o car mania.

By Peter Galuszka i Moscow

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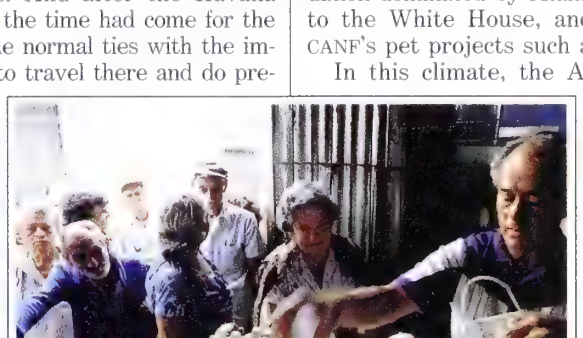
WARMER WINDS ARE BLOWING FROM WASHINGTON TO HAVANA

As Fidel Castro courted leaders from Latin America, Spain, and Portugal at a recent summit in Brazil, Cuba's economic czar, Carlos Lage, laid on the charm or U. S., Mexican, and European business executives at a Havana conference.

Both Cubans came away with small triumphs. Castro persuaded the Latin leaders to criticize the U. S. embargo against Cuba—though in the coyest terms. And after the Havana powwow, some U. S. executives said the time had come for the U. S. to drop its embargo and resume normal ties with the impoverished island. "I should be able to travel there and do preliminary work and keep track of my foreign competitors," said one frustrated U. S. executive.

The Clinton Administration is waiting for the outcome of an intergency review before declaring itself on Cuba. But close watchers of the Washington-Havana tea leaves think they detect a change from the rigid position of Bill Clinton's Republican predecessors. "There is a reasonable spirit here in Washington compared to the Reagan extremes regarding Cuba," says Rear Admiral Eugene J. Carroll Jr., director of the Center for Defense Information. Carroll and other retired U. S. officers recently visited Havana to discuss ways the two countries can improve relations.



LINING UP TO BUY EGGS IN HAVANA: FOOD IS SCARCE

GENTLE PRESSURE. Despite campaign posturing to the contrary, Clinton has cooled off the hard-line rhetoric that prevailed under George Bush and Ronald Reagan. He is also expected to soon issue new rules that would allow American Telephone & Telegraph Co. and other U. S. telecommunications operators to begin sharing some revenues with the Cubans—a step toward better phone connections.

Meanwhile, gentle pressure is building among some members of Congress as well as factions of the Cuban exile community for the U. S. to go a different route. "Cuba policy is growing as an issue," says Representative José E. Serrano (D-N.Y.), chairman of the Congressional Hispanic Caucus. "People are asking why we have relations with China and not Cuba."

Polls show that most Cuban-Americans oppose any thawing of relations. But the powerful Cuban American National Foundation dominated by Miami Cubans has lost much of its entrée to the White House, and Congress may chop funding for CANF's pet projects such as TV Martí.

In this climate, the Administration seems headed for a deal with Congress that keeps most restrictions but opens up travel and communications—anything likely to promote change in Cuba. The U. S., for example, is easing up on visits by teachers, artists, and religious groups, as well as the export of books and films. "Look at the Warsaw Pact," says a congressional aide. "Where there was a lot of intellectual exchange, the system collapsed."

Their collapsing economy is forcing some changes in Cuban thinking as well. Food and medicine are scarce or nonexistent except on the black market, and blackouts are common. At the Havana conference, executives heard about plans to attract foreign investment in tourism, oil, and nickel ventures. The Cubans also want private partners for 131 state companies in everything from sugar refineries to electronics. To tame the black market, Castro will soon declare the dollar legal tender.

Of course the trade floodgates with the U. S. aren't going to fling open very soon. But in the post-cold-war world, pressures to end the U. S.-Cuban standoff are mounting.

By Gail DeGeorge in Havana, with Douglas Harbrecht in Washington

GLOBAL WRAPUP

A TV COUP IN MEXICO

In an upset, Ricardo Salinas Pliego, head of Elektra, the country's biggest consumer-electronics retailer, has won two government-owned national TV channels and 126 movie theaters with a $641 million bid. He beat out three lower bidders, among them a group including Paramount Communications Inc. and Capital Cities/ABC Inc. The 37-year-old executive, who admires but is not related to President Carlos Salinas de Gortari, says he sees no need to improve his channels' bland news formats. This comes as a disappointment to Mexicans hoping for an alternative to the dominant Televisa network's pro-government coverage. Analysts also think the winning group is too weakly financed to give Televisa much competition.

THE REAL THING IN VIETNAM

The decision to station three American diplomats in Hanoi moves the U. S. even closer to recognition of Vietnam. U. S. companies are hustling to get in position for a go-ahead from Washington—expected this fall. In the latest move, Coca-Cola Co. has inked a $25 million soft-drink joint-venture deal with its former Vietnamese bottling company, Chuong Duong Beverage Factory, through Coca-Cola bottlers in Singapore and Thailand. The deal is contingent on Bill Clinton's allowing the embargo against Vietnam to expire.

NEW BOSS FOR A BANK?

Jacques de Larosière is likely to be named soon as president of the European Bank for Reconstruction & Development (EBRD)—the Western-financed lending agency for eastern Europe and the former Soviet Union. The appointment of de Larosière, a governor of the Banque de France and a former managing director of the International Monetary Fund, will help rebuild the credibility of the EBRD. The bank has been badly scarred by the uproar over outgoing President Jacques Attali's free-spending ways.

THE BUDGET

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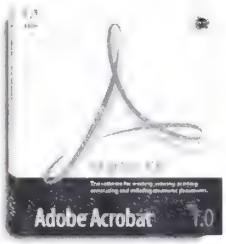

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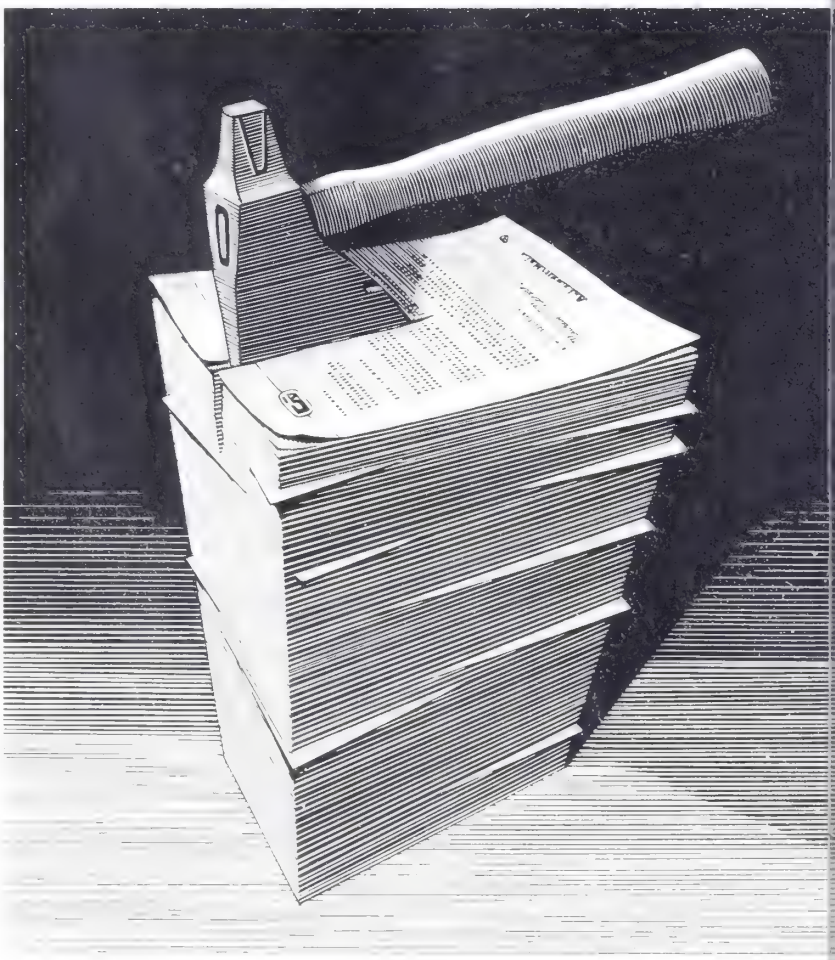

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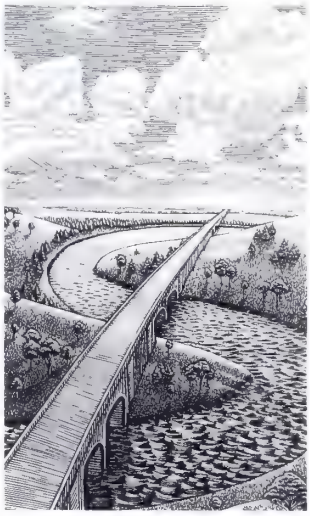

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STRATEGIES

TI IS MOVING UP IN THE WORLD

It's now focusing on high-margin products for corporate clients

Four years ago, Texas Instruments Inc. was the dinosaur of the semiconductor industry. The company that invented the integrated circuit in 1958 had failed to keep pace with the technological revolution sweeping the chip industry. During the 1980s, the company's share of the chip market plummeted to 5% from 30%. Worse, TI slipped into the red in 1989, with the company posting a loss of $39 million.

Nowadays, though, TI is looking a lot healthier. The Dallas-based company has spent the past few years drastically overhauling its strategy and remaking its culture. The inventor of the digital watch and an early entrant into personal computers, TI has scrapped its plans to build a billion-dollar consumer business. Instead, it's focusing on high-tech corporate clients. And this traditional supplier of cheap, off-the-shelf memory chips is moving upscale. The company now gets almost 50% of its revenues from high-margin products such as microprocessors and customized chips, compared with just 25% or so in 1988.

For a supposed dinosaur, TI is acting remarkably nimble. Despite the recent recession, the company managed to increase its manufacturing capacity by roughly a third by pursuing joint ventures in Europe and Asia. That in turn has enabled it to cash in big on the now-surging demand for chips. On July 16, TI said that its earnings jumped 55% in the second quarter, to a record $112 million, as revenues grew 13%, to $2.1 billion. For the year, analyst Millard Phelps of Hambrecht & Quist Inc. expects profits to rise by 41%, to $417 million, with revenues increasing 5%, to $7.8 billion.

HOT STOCK. Not that all TI's worries are behind it. More than half of its chip revenues still come from basic commodity chips. And analysts fear that an imminent slowdown in the PC market could depress chip demand and snuff out TI's turnaround before it captures a significant share of the market for more sophisticated chips. TI's stock, a hot performer this year, fell 6% the day it reported its record profits, largely because of concern about the chip business following a loss at Apple Computer Inc. and expected red ink at Dell Computer Corp. The shares have since recovered to about 73.

The tale of TI's transformation begins in June, 1989, when CEO Jerry R. Junkins called his top 20 deputies to an Austin (Tex.) hotel for a week-long strategic-planning exercise dubbed TI 2000. Many attendees expected another routine corporate thinkfest. Instead, as one attendee recalls, the genial Junkins, who has been CEO since 1985, voiced what most of the group already knew: "We've been infected by mediocrity, and we're not the company we thought we were."

That certainly was clear. By 1989, TI had dropped from a dominant first to a moribund seventh in chip sales. Why the slide? The company's preoccupation with building a consumer business distracted TI from its bread-and-butter chip business. First came its failed attempt to build a home computer. Two years later, in 1985, TI's personal computer flopped. Its technology wasn't so much to blame as a failure to read the market. TI's PC, for example, couldn't use the widely available software developed for the IBM PC, the industry standard.

One of Junkins' first tasks: revamp the tightly controlled culture that long prevailed at TI. His predecessor, Mark Shepherd Jr., had closely monitored every facet of TI. And executives often were reluctant to speak their minds. But Junkins wasn't interested in micromanaging. He believed less meddling from headquarters would lead to a freer exchange of ideas and ultimately to more innovative thinking. Junkins also encouraged senior managers to loosen up. "We outlawed the use of slides in the presentations and sometimes didn't even set agendas," recalls William F. Hayes, who runs TI's defense unit.

Junkins also knew TI had to redefine its basic business if it hoped ever to regain its past glory. After scaling back TI's ambitions in the consumer business, he took a hard look at the chip industry. With technology advancing and competition intensifying, customers were demanding more complex, customized chip products. And that was devastating news for a commodity-chip producer such as TI, which sold most of its chips through a catalog.

NEW FAITH. One way to overcome this market disadvantage, in Junkins' view, was to start jointly designing chips with key customers. TI had long felt its chip knowhow was the best in the business and paid little attention to outside technology. "We were so successful in the 1950s and 1960s that we became a real arrogant bunch of young SOBs," admits former CEO Shepherd. But by collabo-

TI'S TURNAROUND STRATEGY...

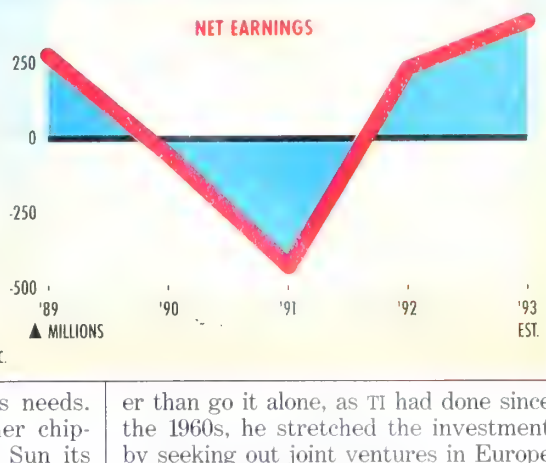
HIGH-MARGIN PRODUCTS Primarily a supplier of commodity chips in the past, TI now gets almost 50% of chip revenues from higher-value components such as microprocessors, digital signal processors, and customized chips.

JOINT VENTURES TI has abandoned its go-it-alone strategy, forming joint ventures in Europe and Asia. Such partnerships allowed it to increase manufacturing capacity at lower cost.

MARKET FOCUS Management has scrapped its plans for billion-dollar consumer businesses, choosing to focus on corporate customers.

STRONG CUSTOMER TIES TI has moved away from a catalog approach to sales by tailoring products to fill the special needs of big customers such as Sony, Ericsson, and Sun Microsystems.

...IS SHOWING RESULTS

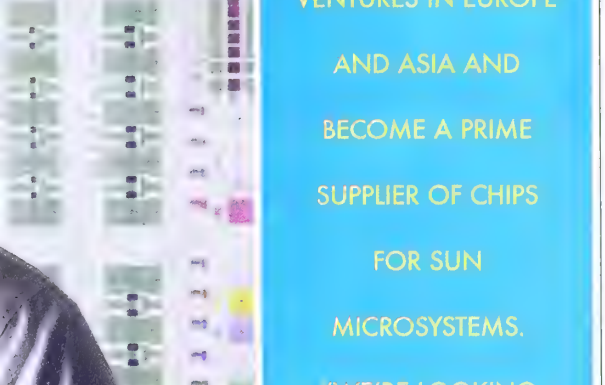


DATA: BUSINESS WEEK, HAMBRECHT & QUIST INC.

ting with clients, Junkins believed TI ould not only start making chips that ad guaranteed buyers but also become n indispensable partner. "We're lookg for shared dependence," says Junns. Moreover, joint development would xpand TI's technology capabilities, alowing it to make complex chips that ould be sold to a wider audience.

That was clearly the goal in 1989, hen TI agreed to make microprocesors for Sun Microsystems Inc. At the me, Sun was trying to perfect its parc microprocessor for its next genration of computer workstations. A umber of licensees had been trying without success to meet Sun's needs. But TI went further than other chipmakers. The company loaned Sun its own engineers and shared its own proprietary technology to help perfect Sparc. As a result, TI has emerged as one of the top suppliers of Sun microprocessors. "TI really understands how to form these partnerships and make them grow," says Mel Friedman, Sun's vice-president for purchasing. The companies are now making joint sales calls to market the chips and exploring ways to share distribution channels.

Pursuing a similar strategy, TI has become a leading chip supplier for Sony, General Motors, and Ericsson. Indeed, next year TI and the Swedish telecommunications giant plan to install a pilot production line to design chips. Once prototypes are developed, the designs would be transmitted electronically to TI fabrication sites.



A daring effort to expand TI's manufacturing capacity is also paying off. TI and other chipmakers were scrambling when the PC market exploded in the 1980s and demand for basic chips soared. U.S. chipmakers, such as Intel Corp., decided to focus on new technologies and surrender much of the commodity chip market to Japanese rivals. By contrast, Junkins believed the basic chip market was critical to TI's future.

It was a risky strategy. Junkins doubled TI's investment in new plants, to more than $1.7 billion between 1989 and 1990. But rather than go it alone, as TI had done since the 1960s, he stretched the investment by seeking out joint ventures in Europe and Asia. TI's first partner was the Italian government. Eager to create new jobs, Italy put up half of the $1.2 billion needed to build a state-of-the-art chip factory in the depressed mountain town of Avezzano in 1990. Three similar deals followed over the next two years with Taiwanese PC maker Acer, Japan's Kobe Steel, and, this past April, with a consortium composed of Hewlett-Packard, Canon, and the Singapore Economic Development Board. The plants in Italy and Taiwan are in full production; the other two should be operating in a year.

NO GUARANTEES. Despite its success, TI's long-term prosperity isn't assured. After growing by 16% in 1992, the semiconductor market's annual growth is expected to slow to 5% by 1995, says Dataquest Inc., a market research firm. And analysts wonder if TI's push into more complex chip markets will produce results fast enough to offset that slowdown. After all, rivals from Motorola Inc. to Toshiba Corp. are also forging customer links to expand their businesses.

And for all its efforts, TI remains dependent on commodity chips. TI Europe President Roberto Schisano says specialty chips should account for 60% of the Avezzano plant's output by 1995, vs. 35% in 1992. But the plant conversion has been postponed because of the demand for commodity chips. What's more, TI's joint-development programs with its high-tech customers have yet to result in sophisticated chips that have blockbuster sales appeal to the broader market, as Junkins had hoped.

For now, Junkins isn't too concerned. All of TI's new plants, he points out, will eventually be capable of making specialty chips. And despite the competition, TI's business relationships are growing. True, the company may not be the market leader it once was—but its fossilized years seem well behind it.

By Peter Burrows in Dallas, with Jonathan B. Levine in Paris and bureau reports

RAY VEGA BW

TRANSPORTATION

AIR FRANCE: IS THIS THE RIGHT FLIGHT PLAN?

Facing privatization, it must cut more costs and find a partner

ATTALI: "A DANGEROUS CRISIS—BUT IT'S ALSO AN OPPORTUNITY"

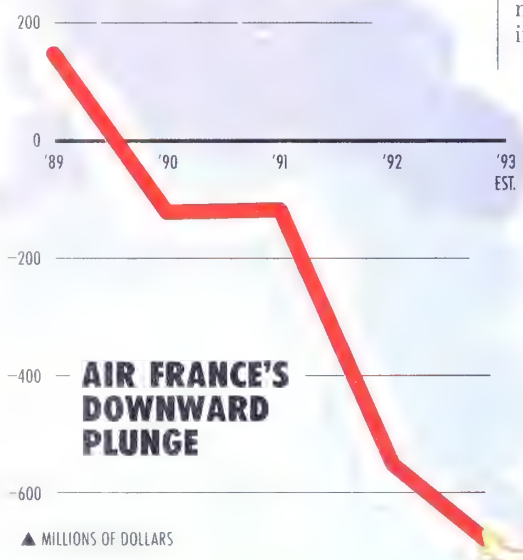
Air France is Europe's biggest airline company—and arguably its stodgiest. It has lagged behind rivals in key areas: controlling costs, starting a frequent-flier plan, and forging meaningful alliances with foreign carriers. Despite Chairman Bernard Attali's efforts to make the state-owned airline more efficient and less bureaucratic, losses continue to grow (chart). Attali pins much of the blame on the European recession. But of Europe's two other big carriers, British Airways PLC remains profitable, while Germany's Lufthansa expects to halve losses this year.

Now, Attali is launching an all-out effort to secure Air France's place in the sky. It's hardly his first such attempt. But this time, success at cost-cutting and at building a critical partnership with a U. S. airline will determine whether the French giant can be privatized, as France's new conservative government hopes. To do that, Air France must hold its own against lower-cost carriers, including archrival BA and a swarm of American airlines. Eight U. S. carriers now fly to France, vs. two in 1985. They have cut Air France's transatlantic market share from 50% to 35%.

ASSET SALES. Determined to slow losses, Attali is drawing up a plan to lay off perhaps 10% of his work force. That follows cuts of 10% over the past two years. Pay is also being slashed. Recently, he got flight crews to accept pay cuts of up to 16%—saving $145 million. "I told them we're not going to stop there," says Attali. "We're in a dangerous crisis—but it's also an opportunity." He is likely to raise cash by selling assets, including the Meridien Hotels Inc. chain.

A U. S. alliance is Attali's other key goal. He needs a partner for "feed" from the U. S. market, especially now that BA has teamed with USAir Inc. Attali is negotiating a deal with Continental Airlines Inc., which he hopes to conclude within two months. It would be a logical extension of a marketing pact he set up last year with Air Canada, now 28%-owner of Continental. All three would tie their routes together—a process on which Air France and Air Canada are now working.

Building a U. S. network is essential, analysts say. And Continental, newly emerged from bankruptcy, may be a better fit for a European carrier than USAir. Its route structure is more extensive than that of USAir, which flies mainly in the eastern part of the U. S.



NOTE: RESULTS FOR 1989 EXCLUDE AIR INTER AND UTA, ACQUIRED IN JANUARY, 1990
DATA: COMPANY REPORTS, BUSINESS WEEK ESTIMATE

Insiders say Attali aims ultimately to buy equity in Air Canada. He won't buy into Continental: He fears an antiforeign backlash such as BA suffered in an aborted bid for USAir. A planned "open skies" accord between Canada and the U. S. could make an Air Canada stake just as attractive.

Attali won't be buying anything soon, however. Cash is tight, so he may seek—and may get—fresh capital from the French government. Air France may lose a startling $1 billion this year, warns Jacques Godfrain, a French parliamentarian and former executive of UTA, an airline Attali bought in 1990. Insiders deny that. Godfrain's remedy: sell Air Inter, France's biggest domestic carrier, of which Air France owns 72%.

CONNECTIONS. Insiders say Attali might try to sell a minority stake. But he wants to control domestic feed for Air France's flights, virtually all of which are international. He may face a struggle: Europe's air deregulation is letting foreign carriers move in. Last year, BA bought 49% of TAT, a French regional airline. TAT flights now arrive at BA's terminal at Paris' Charles de Gaulle Airport and connect with BA service to other European cities. Ironically, Air France has trouble doing the same. Three years after the Air Inter takeover, most Air Inter flights still arrive at Orly Airport.

Air France's boss says he's working to fix that. And he's counting on a new advantage at de Gaulle. Next spring, a terminal will open there for France's *trains à grande vitesse*, or high-speed trains. The TGV will whisk passengers at speeds up to 200 mph from the provinces directly to Air France's big hub airport. All airlines there will benefit, but none as much as Air France, which dominates de Gaulle.

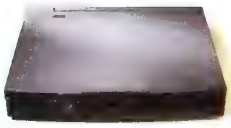
Attali is also eyeing European partners. In a recent letter to the chairman of Swissair—leaked in the Swiss press—Attali suggested that the two carriers discuss an alliance if Swissair's plan to merge with KLM, SAS, and Austrian Airlines collapses. Such an airline would rival Air France as Europe's biggest carrier. "It's too bad Swissair didn't talk to us first," says Attali. So far, his letter hasn't been answered.

But Attali seems on the right track with Continental. And outsiders applaud his cost-cutting plans, though many doubt he'll cut enough. They're wrong, he says. "We have some surprises in store for our competitors." Attali has made such claims before. Now, he badly needs to be right.

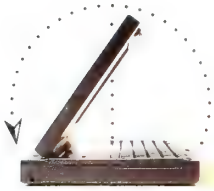
By Stewart Toy in Paris, with Andrea Rothman in New York

It sits,
lies down,
and does
back
flips.

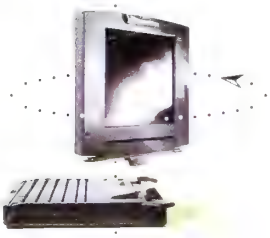
Good



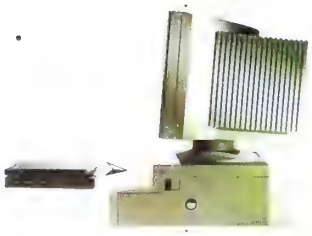
The most flexible screen ever seen



It opens flat up to 180°



Or flips around in just seconds



Thanks, even a [illegible] [illegible] [illegible]

oy.

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Versa functions as a pen based tablet to enter notes or data

The reversible screen makes presentations a snap

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Communications Features

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GULATION

DEAR: FACING AN ANTIQUATED COMPUTER SYSTEM AND A SKELETON FIELD STAFF

STEPPING INTO THE MIDDLE OF OSHA'S MUDDLE

an Joe Dear repeat the magic he worked in Washington State?

Few federal agencies have careened from one ideological extreme to the other more than the Occupational afety & Health Administration. Under ıe heavy hand of Democratic regulaors, OSHA in the 1970s provoked the e of many employers with its slew of ıles and safety standards. Under Presents Reagan and Bush, it had a handsf approach—with the result that more ork time is now lost to injuries, on a er-employee basis, than 20 years ago.

President Clinton promises to stabilize SHA squarely in the ideological middle. espite Clinton's campaign debt to unns, Labor Dept. officials say they hope develop innovative ways to improve orker protection while also giving emloyers more leeway in meeting safety andards. On July 2, Clinton said he ould hand that delicate task to Joseph . Dear, a former head of Washington tate's Labor & Industries Dept., who ot the nod for OSHA director over several union candidates. Dear "has a ecord of bringing everyne to the table and getng consensus," says Laor Secretary Robert B. eich. "I don't think we an make progress unss we get the business ommunity on board."

The challenges facing SHA will test Dear's kills. Years of budget slashing have pared the agency's compliance staff by 25%, to 1,120. An antiquated computer system has left it unable to target worksites with the greatest safety risks. And in 1992, a federal court overturned OSHA's plan to set exposure standards for some 400 toxic substances, undermining its ability to protect workers.

The biggest potential dilemma for Dear may be how to manage a sweeping overhaul of safety laws proposed by liberal Democrats (table). The bill's most controversial feature: Employers with 11 or more workers would have to form joint labor/management safety and health committees with elected employee representatives. The Administration hasn't taken a stance on the bill, which advocates say would promote the labor/management cooperation that Clinton favors. Many executives oppose it as a "sham for union organizing," says Peter J. Eide, a human-resources expert at the U. S. Chamber of Commerce.

Dear, 42, declined to be interviewed before the Senate vote on his appointment, which hasn't been scheduled. But his record in Washington State shows how his views have evolved over time—and provides clues to how he would run the agency. He started out as a liberal activist, founding a group at age 26 that for four years crusaded—with no success—to make the state tax system more progressive by creating an income tax. He later worked for the state chapter of the AFL-CIO before becoming a centrist bent on making creaking bureaucracies more efficient. That will be one of his top priorities at OSHA, a change both business and labor would welcome.

Along the way, Dear developed a reputation for being able to bring labor and business together. In 1985, he became assistant and heir apparent to Richard A. Davis, head of the state's Labor Dept. The two set out to overhaul the state workers' compensation insurance program, which was $225 million in the red despite premium hikes of nearly 50% over two years. Davis, a former U. S. West Inc. executive, lobbied business to swallow yet another rate increase, of 18%. And Dear persuaded labor to agree to $79 million in annual savings by, for instance, reducing costly vocational-rehabilitation payments.

"BUSINESS APPROACH." Dear continued the effort when he took over from Davis in 1987. He persuaded state lawmakers to spend $40 million for a modern computer system. The agency then developed data bases to spot emerging injury trends and speed up claims processing, which got workers back on the job more quickly. Dear also required employers to pay insurance premiums based on their own safety records rather than on an industry average. The result of his and Davis' initiatives: The workers' comp fund reached solvency in three years and today enjoys a $350 million surplus. Workers got improved benefits and employers' costs were cut. "Joe was the first director to bring a business approach to the department," says Michael Sotelo, the safety director at Seattle-based W. G. Clark Construction Co.

State workers' comp problems may be narrower in scope than national safety issues, but they're no less thorny. If Dear can replicate in the other Washington what he achieved in his home state, business and unions may no longer consider OSHA a four-letter word.

By Dean Foust in Washington, D. C.

WHAT MAY BE IN STORE FOR OSHA

STANDARDS The Occupational Safety & Health Administration plans to develop limits on how long workers can be exposed to toxic substances

LAWS A bill in Congress would allow workers to refuse risky tasks and require companies to form labor/management safety committees

ENFORCEMENT The agency is expected to stiffen civil penalties for safety violations and seek criminal sanctions for management negligence

DATA: BUSINESS WEEK

CHERYL CHANG/SEATTLE TIMES

WHAT'S WRONG?

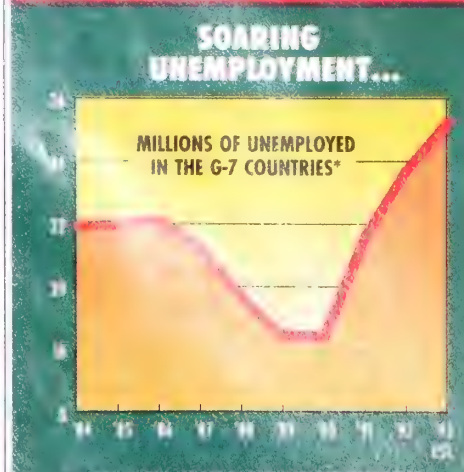
WHY THE INDUSTRIALIZED NATIONS ARE STALLED

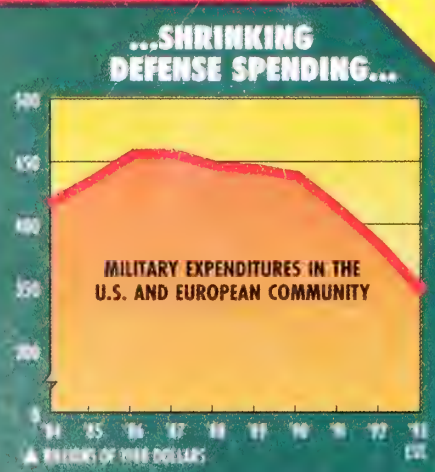
This should be the best of times. After half a century of oppression, the peoples of eastern Europe and the former Soviet Union have buried communism. China's Communist mandarins are embracing free markets. The governments of Latin America are accelerating their turn toward capitalism and democracy. For the industrialized nations, the end of the cold war heralded prospects for peace. It also signaled something more: new markets and new economic opportunities.

With a spectacular surge of energy, the emerging capitalist countries have been building bridges of commerce with the richer countries and each other. The struggling economies of the former East bloc are selling more commodities and manufactured goods to their former enemies. Third World nations are welcoming foreign companies and investors, once the hated symbols of Western imperialism. The result: Their economies are booming. Since 1989, Malaysia's economy has grown at a 9% yearly rate, Indonesia's at a 6.8% pace, Chile's at 7%, and China has seen its per-capita income soar by 30%.

But hopes for a similar burst of economic activity in the industrial nations have been dashed. Canada, Britain, and the U. S. are stuck in low gear, Japan's economy is weaker

THE NEW ECONOMIC ORDER





han it has been in almost two decades, nd Europe is in recession. Employment n the world's seven richest nations, the so-called Group of Seven, has fallen over the past two years. More than 25 million people are out of work, and the jobless count is rising.

No wonder many people share a sense of foreboding, a deep-rooted fear that the world's leading economies have lost their edge. Everywhere you look, that fear is pitting those profiting from the global economy against those losing jobs to overseas rivals. Stagnant wages are inflaming anti-immigrant passions in Europe and the U. S. Rising poverty is stirring worries about declining living standards.

What's wrong? Why is it that the U. S. and the other industrial nations can't grow faster? Why are unemployment high and job prospects bleak? The answer is that a new, brutally competitive world economic order is emerging with the demise of the cold war. The forces that are propelling this new order will persist for years and promise to make life tougher for almost everyone—from assembly-line workers to chief executives.

The fundamental force behind this new order is the integration into the global economy of the new capitalist nations and much of the developing world. With more than 3 billion inhabitants, many of them hungry for a better life, these new free-market adherents are competing as never before with the industrial world.

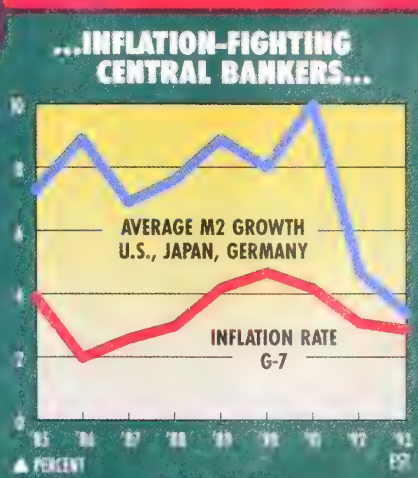
In just three years, the developing nations' share of world exports has jumped by some three percentage points, to 20%. As socialism fades from Russia to Vietnam and as borders open up from Mexico to Argentina to Indonesia, a new global trading system is emerging.

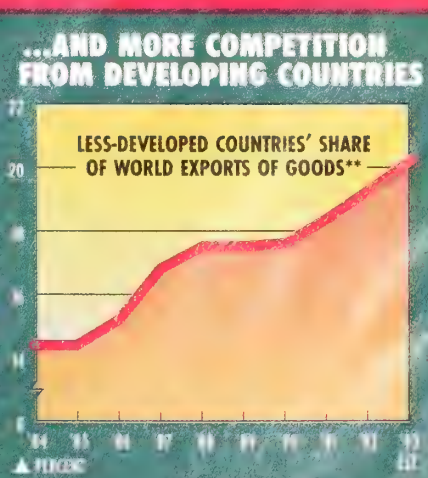
The world's richest countries are reeling from a "supply shock" of goods and people from the former East bloc and developing nations. To stay competitive, companies are locating more facilities abroad, eliminating jobs, and investing in technologies to boost productivity. "Integration of the world's economies, still in its adolescent stage, tends to eliminate differentials across countries," says David E. Bloom, an economist at Columbia University. "The industrial nations will underperform the rest of the world economy."

"DEMAND BOOM." The cold war's end is hammering the industrial economies in another way. Now that the "evil empire" is no more, the world's most expensive arms race is over, and military demobilization is picking up steam. "The peace dividend, at least in the short run, is unemployment," says Michael D. Intriligator, economist at the University of California at Los Angeles.

Does the new economic order signal the end of prosperity for the industrial world, much like the contraction of the British Empire? To some, the answer is yes. The head of a major European steel producer hurting from foreign competition put it this way: "To the extent you raise the standard of living of developing countries, you must have a corresponding drop of the living standard in the West."

But history argues the opposite: Freer trade and broader markets create more growth, not less. The "supply shock" of cheap goods from the new capitalist countries will generate a "demand boom" for sophisticated goods and services, creating new jobs and economic wealth in the industrial countries. These countries have huge infrastructure needs, from power generators to air-





traffic-control systems. They also will have billions of consumers with improving incomes.

The rub is that this demand boom will take time to develop. Several economies in Latin America and Asia, including Mexico and China, are cooling down as governments curb inflationary pressures. Political instability, especially in eastern Europe and Russia, could also damp demand from the emerging capitalist nations. "The economic revival for the industrialized world is two to three years away and, pessimistically, as much as 10 years away," says Albert M. Wojnilower, senior adviser at First Boston Asset Management.

More worrisome is that governments in the industrial countries will buckle under increasing pressure to shut out foreign trade. The lesson of the Great Depression is that beggar-thy-neighbor protectionism ends in an economic collapse. "There is a genuine risk that before too long a political backlash in the developed countries will lead to more protectionism, aborting development in many of the new regions and generating a depression," says Giles Keating, an economist at Credit Suisse First Boston Ltd. in London.

EMERGING COMPETITOR CHINESE-MADE SNEAKERS HAVE HELPED THAT NATION GRAB 15% OF U.S. CONSUMER IMPORTS

At the moment, the industrial economies are being deluged with raw materials and cheap manufactured goods. Coal, nickel, magnesium, and other commodities are coming out of Russia, sometimes smuggled through the newly independent Baltic countries into Western Europe. The talk in Moscow is that many of the young *nouveaux riches* tooling about town in Mercedes-Benzes or BMWs got rich trading metals.

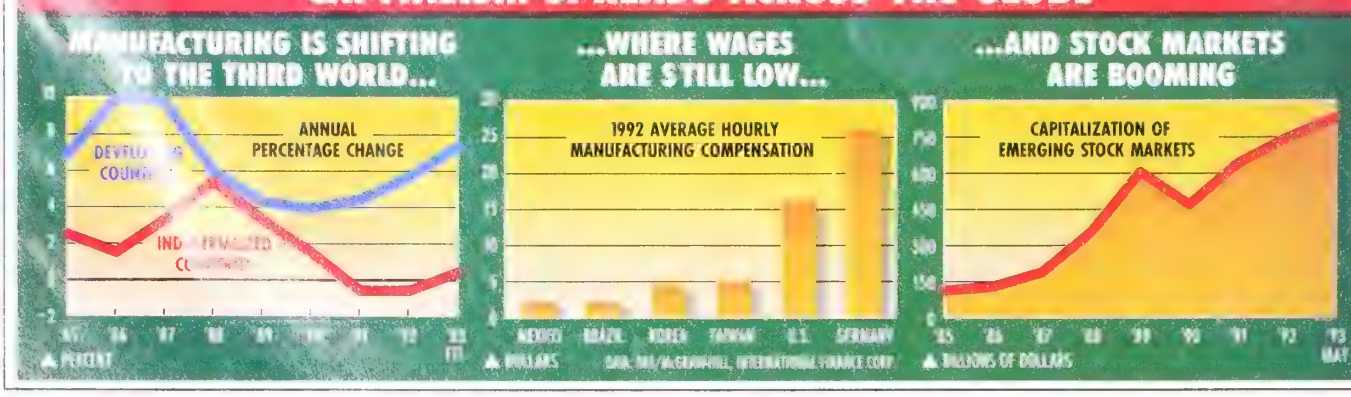
Last year, Russia's aluminum companies sold as much as 1 million metric tons in world markets. The Russian invasion is one reason why Aluminum Co. of America says it laid off 750 workers and idled a quarter of its manufacturing capacity on June 28. The Western aluminum industry has reduced its total output by 7.5% (1.2 million metric tons). The former East bloc countries are becoming more market-oriented, and, says Alcoa Chairman Paul H. O'Neill, "we believe the facts of [the aluminum] industry apply to several other basic-materials companies and industries. Looming on the horizon are the same circumstances for fabricated and finished goods including such high-technology products as commercial aircraft."

Free markets have taken deep root in Southeast Asia and, more recently, in Latin America. Both regions are competing for markets and jobs with a plentiful work force and low wages. For example, a German production worker is five times more expensive than a Taiwanese worker and costs 10 times more than a Brazilian or Mexican competitor. No wonder manufacturing from the industrial nations is continuing to move to these low-wage areas.

It's not just cheap labor though. Korea, Taiwan, Hong Kong, and Singapore, the so-called Four Tigers of Asia, are creating high-tech industries through technology transfers from the industrial world. Multinational corporations are building state-of-the-art manufacturing facilities in developing countries. Altogether, industrial production in the developing countries has grown at a 4.6% annual rate since 1989, compared with a mere 0.1% yearly pace in the richest countries, according to DRI/McGraw-Hill. Brazil is exporting everything from hydroelectric generators to sewing-machine motors. China accounted for 15% of total U.S. consumer-goods imports last year, up from 5% in 1987, figures Bruce Kasman, economist at Morgan Stanley & Co.

POLISH PROGRAMS. The industrial world's traditional lead in brainpower is eroding as well: Many of the new competitors are not wanting for skilled machinists, engineers, and even top-flight scientists. Texas Instruments Inc. has been designing integrated circuits and software in India since 1986. Sun Microsystems Inc. recently hired Russian scientists for software and mi-

CAPITALISM SPREADS ACROSS THE GLOBE



COMMODITY FLOOD
LOW-PRICE RUSSIAN COAL, NICKEL, AND MAGNESIUM ARE DELUGING INDUSTRIAL ECONOMIES

croprocessor research.

Three years ago, Tadeusz Witkowicz, chief executive of CrossComm Corp., a $30 million communications equipment maker, met a University of Gdańsk professor who sold him on the high skills and low wages of Polish computer programmers. Today, the Marlborough (Mass.) company has 34 developers writing communications software from offices at the University of Gdańsk. The Polish workers make between $7,000 and $18,000 a year—a fraction of the pay for a comparable U. S. worker. Yet their skills are so good that the Gdańsk team wrote CrossComm's latest and most-advanced network software.

Stories like this show why investing in the developing countries has become so attractive. Foreign direct investment in these countries has doubled from an average of $23 billion from 1986 to 1990 to almost $50 billion in 1992. Foreign and domestic investors alike are pouring billions more into emerging-country stock markets like those of Mexico, India, and Korea.

Overseas investors are scrambling to buy into privatizations. The sale of state-run companies to private investors is picking up in eastern Europe, especially in Poland and the Czech Republic. Despite political opposition, Russia has moved swiftly to start privatizing its heavy industry.

"DERELICT." Rapid-fire privatizations from Peru to Argentina are driving Latin America's market revolution. On June 28, for instance, Argentina sold off shares in its state oil company, YPF. Together, Argentine and foreign investors snapped up 45% of the company, and the Argentine government pocketed $3 billion. "In the 1960s and 1970s, many poorer countries believed in self-sufficiency and closed themselves off to the world," says Paul Romer, economist at the University of California at Berkeley. "The biggest change in the developing world is that many countries now see the advantage of direct foreign investment and being attached to the world economy."

The new economic order is fast transforming the once inflation-prone industrial world. White-hot international competition is putting enormous downward pressure on prices, and disinflation is becoming the norm. Consumer prices in the G-7 countries are down from an average annual rate of 4.7% in 1990 to a 2.9% yearly pace this year. And in the U. S., the consumer price index rose at a 2.2% annual rate in the latest quarter. Since 1990, import

DEVASTATED DEFENSE
A MILLION U.S. DEFENSE WORKERS HAVE LOST THEIR JOBS SINCE THE END OF THE COLD WAR. LOCKHEED WILL LAY OFF 24% OF ITS FORT WORTH WORK FORCE

prices of all goods from the developing countries have dropped by 12%.

Another way to measure the degree of disinflationary pressure is through the concept of the "output gap"—the difference between a country's potential and actual gross domestic product. The output gap of the six largest industrial nations, based on estimates of long-run productivity and labor-force growth, is 5% of GDP. It reflects huge excess capacity in both labor markets and product markets, says William Sterling, economist at Merrill Lynch & Co.

But these signs of disinflation seem to be ignored by the industrial world's central bankers. They are keeping monetary policy relatively tight, damping economic growth. "History has accused the central bankers of being derelict in fighting inflation in the 1970s and 1980s," says First Boston's Wojnilower. "It will accuse them of being derelict in the opposite direction in the 1990s."

Fiscal policy is also slowing growth in the industrial world. Social programs have become hugely expensive in all the industrial countries. Their budget deficits are approaching historic highs at an average 4% of GDP. The G-7 countries, with the exception of Japan, are trying to restrain spending. Fiscal constraint could reduce economic growth in the industrial world by over one percentage point during the 1993-94 period, according to economists at Morgan Stanley.

"LOW-COST GAME." Defense cuts are devastating an industrial infrastructure and skilled work force built up over the past half-century. The economic impact is greatest in the U. S. Military spending has dropped by 15% since 1989, after adjusting for inflation, and a million defense industry workers have lost their jobs. Real defense spending is projected to fall by an additional 25% over the next four years. And another million workers could get pink slips by 1996, according to William Sterling of Merrill Lynch. By the end of next year, for example, Lockheed Corp. says it plans on chopping 24% of its 19,000-person work force at its operations in Fort Worth. The layoffs mostly stem from cutbacks in the manufacture of F-16 fighter jets.

In Europe, real defense spending is down by 12% since 1989, with the biggest fallout in France and Britain. Europe's military expenditures are forecast to drop by as much as 5% a year in real terms for the rest of the decade. And employment in the European arms industry could fall by one-third to one-half over the next few years, according to the Stockholm International Peace Research Institute and others.

The industrial world is adapting to the new economic order, but it's a hard slog. The U. S. is ahead of the pack, largely because it has been traditionally a more open economy and has been fighting the battle for profits and markets with Japan, Germany, and the Four Tigers of Asia for more than a decade. Facing vicious competition at home and abroad, American companies have been investing in new technologies and overhauling the workplace. America has gone further than any other industrial country in deregulating its financial services, airlines, telecommunications, and trucking industries. The result: Even traditionally sheltered industries have been compelled to restructure to meet new price competition.

American companies have become a lot more competitive in recent years, and so has the American work force, even when up against stiff price competition from abroad. Take Xerox Corp. It imports low-cost copiers from a joint venture in Japan for sale in the U. S. But Xerox also makes high-priced copiers in Webster, N.Y., for export to Japan. For Xerox and many other American companies, labor costs are only one factor in a complex global equation. Quality matters, and so does worker productivity. In an interdependent global economy, "we don't want to get trapped in just the low-cost game," says A. Barry Rand, executive vice-president at Xerox.

OFFSHORE SHIFT. Europe is in the early stages of a similarly wrenching overhaul. France's new government, for example, has announced plans to privatize nearly two dozen state-owned companies, including Air France and Renault. Once in private hands, these former state-run companies will strive to become more efficient competitors and restructure their operations. Stung by global rivals, Germany's corporations are

IMMIGRANT INFLUX AS NEWCOMERS POUR IN FROM EX-COMMUNIST NATIONS, GERMANY TRIES TO STOP THE FLOW —AND THE UNREST

EVEN IN HUMAN TOUGHNESS IS RISING AS COMPANIES FEEL THE PAIN

ving off workers and moving new ants overseas.

Corporate restructurings abroad are und to take longer than in the U. S., ough. Europe's unions are more powful and their job protections far ronger. The European Community ants the steel industry to slash capacy, but Italy, Spain, and other governents are reluctant to reduce subsidies their steel producers for fear of adg to the unemployment rolls. German eelmakers are lobbying for the EC to nd jobless benefits to astern Europe and bar ports of East Europe steel. Social tensions e further exacerbated ethnic conflicts, as a le of immigrants from estern Europe's forerly communist neighrs and from North Afa pours in.

SS THAN BLEAK. Even pan is beginning to el the force of the new onomic order. True, pan is running a huge ade surplus, and unlike e other industrial naon, it has a fiscal surus. But economic owth is at its lowest vel in almost two ecades, and the Liberal emocratic Party must are the reins of power r the first time in four ecades.

Japanese companies e being hurt by ineased global competion, especially in overas markets. In reonse, they are building more plants overas, even as unemployent rises at home. issan Motor Co.'s $800 illion expansion of its uto plant in Aguascaentes, Mexico, will ake autos not only for e Mexican market but so for export to Japan, Canada, and e rest of Latin America. "We have to celerate our shift to offshore producon," says Michiyuki Uenohara, an exective adviser at NEC Corp. and a ferer senior executive and board member. t's unavoidable."

The outlook may be rough, but it isn't eak. Lower inflation rates are bringing own interest rates in all the rich counies. After a decade of debt profligacy uring which they put up skyscrapers nd leveraged balance sheets, compaies throughout the industrial world toay are eagerly refinancing high-cost debt at cheaper rates and raising billions in new equity.

In the longer term, freer trade is likely to spur faster economic growth. With many of their economies growing at a 5% to 9% annual rate, the emerging capitalist countries are beginning to spend more money on roads, sewers, environment, health care, and consumer goods. Over the next decade, Asia, excluding Japan, is expected to spend at least $1 trillion on telecommunications and power equipment alone. Westinghouse Electric Corp. recently announced an agreement to modernize 400 power plants in China.

THE FATAL MISTAKE. Consumer spending, too, is rising faster in the developing world than it is in the industrial countries, and the overseas markets for Coca-Cola, Procter & Gamble, McDonald's, and Citicorp are increasingly lucrative. "There are billions of new consumers coming into the marketplace. In the late '90s, there's going to be pretty dramatic growth," says William S. Stavropoulos, president of Dow Chemical Co.

These signs of improving trade and prospects for better growth ahead are still fragile. In every industrial nation, the combination of global competition and technological change is eliminating jobs and holding down wages. More and more people feel threatened by cheap labor in the emerging capitalist countries. Many industries are up in arms against "unfair" foreign competitors. The political leaders of the industrial world face mounting calls to shut out trade and immigrants. "Walling off thriving new industrializing economies would be a fatal economic error," says Lawrence H. Summers, Under Secretary for international affairs at the Treasury Dept.

PRIVATIZATIONS
FOREIGN AND DOMESTIC INVESTORS RECENTLY SNAPPED UP ABOUT 45% OF ARGENTINA'S STATE-RUN OIL COMPANY, YPF

These calls are becoming harder for heads of state to ignore, even though the recent G-7 meeting in Tokyo showed that world leaders are trying to move toward lower tariffs and more open markets. The free-trade system that America has championed since 1945 was designed with security concerns in mind, and for decades, fear of communism kept economic disputes from tearing the allies apart. With communism no longer a threat, trade issues are becoming far more contentious.

Still, freer markets and freer trade in the new global economic system are what will ultimately put an end to slow growth and high unemployment in the industrial world. "If a foreign country can supply us with a commodity cheaper than we ourselves can make it, better buy it of them with some part of our own industry," the Scottish political economist Adam Smith wrote more than 200 years ago. And that's what the new economic order is all about. The sooner the industrial countries learns to live with it, the sooner the global upturn will begin.

By Christopher Farrell and Michael J. Mandel in New York, with Bill Javetski in Paris, Stephen Baker in Pittsburgh, and bureau reports

Commentary/by Karen Pennar

THE GLOBAL ECONOMY NEEDS BRIDGES—NOT WALLS

It's easy to fall into the habit of blaming our woes on others. Today, it often seems as if growth and job gains in the developing world are coming at the expense of the industrialized world—and the evidence exists to support the argument. After all, U. S. manufacturers have said that they are shutting down stateside plants and moving production to Mexico, where labor is far cheaper.

But world growth is not a zero-sum proposition. Since the postwar recovery began in 1950, average annual growth, globally, has been 3.5%, while the value of trade, in real terms, has grown 6.5% a year. For every $100 billion more in goods that are traded around the world, growth is pushed about $10 billion to $20 billion higher than it otherwise would be, says Gary C. Hufbauer, economist at the Institute for International Economics, a Washington think tank. And even those numbers underestimate the gains, since cheap imports raise the buyers' standard of living by allowing them to purchase the same goods at lower cost.

There are, to be sure, winners and losers. Trade induces sizable shifts in production, swiftly creating and destroying jobs. It was the industrialized nations' recent poor record on job creation that prompted President Clinton's call for a Group of Seven jobs summit—a meeting that needs to be more than just another Clinton teach-in gone global.

ONE-PERCENT ANTE. The Clinton Administration might do well to start by addressing the people who have been left behind. Rudiger Dornbusch, a Massachusetts Institute of Technology economist and BUSINESS WEEK columnist, suggests that the U. S. should pledge 1% of its gross domestic product toward retraining and offering displaced workers other assistance. "We take it for granted that free trade is good, but that's not true if we don't compensate the losers," says Dornbusch.

If the U. S. and other industrialized nations do a better job of tending to their own, they ought to be better able to resist the temptation to scapegoat developing nations. Instead of preaching protectionism, G-7 officials should devise new strategies for dealing with the developing world and with the eastern European and former Soviet nations now in economic transition.

For instance, the industrialized nations ought to extend the goodies that bilateral and regional agreements offer select countries, says Peter F. Cowhey, professor of international relations at the University of California at San Diego. Cowhey proposes a "wedding-cake approach," whereby developing nations, depending on the extent to which they open their own markets and deregulate their financial systems, are permitted to ascend into the ranks of free traders. This way, they would receive more benefits in return for fulfilling more obligations under the multilateral trading system, known as the General Agreement on Tariffs & Trade.

Similarly, promises of membership in such groups as the Organization for Economic Cooperation & Development might be extended. Mexico wants to join the OECD and is likely to do so within a year or two. And Western Europe should eschew restrictive trade practices, such as the imposition of tariffs and import quotas, which will reduce output and incomes in eastern Europe and bring still more immigrants pressing against their own borders. Instead, promises of Eastern European entry into the European Community should be formalized, and a schedule for trade liberalization should be adopted.

OFFERING A CARROT. Finally, foreign aid, debt negotiations, and trade should be tied to specific objectives—not, as so often in the past, to military sales or purchases of goods from the donor country. It sometimes may make sense for the U. S. and other industrialized nations to seek certain outcomes, such as a cleaner environment and an improved record on human rights. And one way to achieve them is to introduce these issues as a condition for assistance or trade.

Novel arrangements known as debt-for-nature swaps, pioneered by Costa Rica, have reduced Third World debt in exchange for programs to protect natural resources, such as forests. Similar swap agreements could tie foreign-aid grants to progress on human rights.

Finally, trade negotiations might acknowledge some of these issues directly and attempt to find equitable solutions for all parties. It's likely, for instance, that the North American Free Trade Agreement will permit the formation of either a special development bank or a fund that will finance infrastructure and environmental projects—and help communities hurt by NAFTA. Certainly, the industrialized world's approach to the developing world ought to be inclusive rather than exclusive. Trade and stronger economic ties between nations are a win-win proposition.

Pennar is a senior writer in economics at BUSINESS WEEK.

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TRUE OR FALSE: MORE MONEY BUYS BETTER SCHOOLS

As the U.S. education system continues to flunk, the debate over funding methods intensifies

In 1968, Demetrio P. Rodriguez sued the state of Texas over its miserly spending in his poor San Antonio school district. Back then, he hoped that by the time his third-grade son reached sixth grade, his district's spending level would equal that of richer ones. Now, his grandchildren attend the school his kids did, and conditions are no better: Often, trailers serve as classrooms, and the ceilings leak. Says Rodriguez: "My grandchildren deserve better."

But his great-grandchildren may face the same fate. In June, a judge preliminarily approved the Texas legislature's latest school-financing plan. In an unprecedented fourth try at satisfying a court order to equalize education funding, lawmakers crafted a plan forcing well-off districts to share their wealth. But a final pact could prove elusive: Lawyers for the poor districts plan to challenge the plan on the grounds that it still doesn't do enough to close the gap.

RODRIGUEZ' LAWSUIT CONTENDS THAT POOR KIDS' SCHOOLS SHOULD BE AS GOOD AS ANY OTHER

HEATING UP. Texas' funding woes reflect a national debate that promises to grow ever more heated. Some 30 states are fighting suits over spending disparities due to variations in local property taxes—or else have had their laws invalidated (chart). But the battle is moving to a higher plane: Instead of clamoring for equal funds, parents and students are also demanding that the money be better spent. Already, courts in Alabama and Massachusetts have ruled that their school systems violate the state's constitution because they failed to provide kids with an "adequate education." This issue is also being fought out in Connecticut and Louisiana.

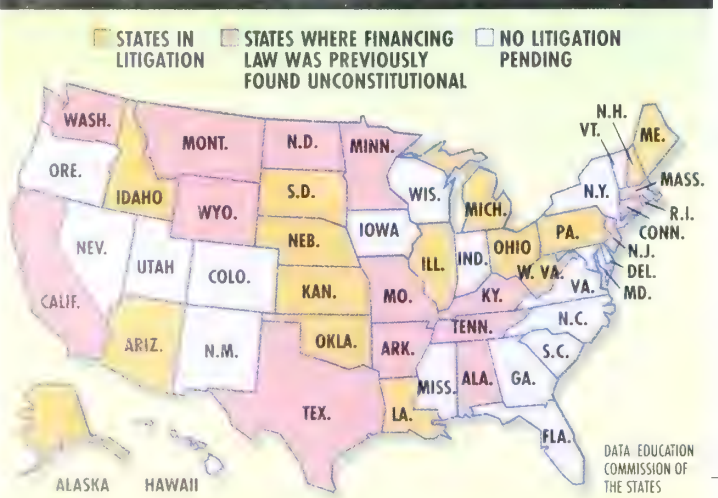
The Clinton Administration's education-reform plan will intensify the dispute by creating opportunity-to-learn standards and urging states to meet them. The controversial rules would give students the basic tools for learning: competent teachers, current textbooks, and clean classrooms. The Administration insists it won't specify rigid rules for class size or spending per pupil, but critics say the standards will trigger suits by parents who feel short-changed.

The question at the heart of the education debate: Is money critical to improving performance, or are other factors more crucial? "Money does matter," says Craig Foster, executive director of the Equity Center, a group of 300 poor Texas school districts that are challenging the state's financing law. "The only people who say it doesn't matter are those who already have it."

But money alone is no panacea (page 63). A decade after *A Nation at Risk*, the federal report warning that schools are failing America's children, the performance of U. S. students remains mediocre: American students still underperform those of other industrial countries, despite one of the highest levels of educational spending. Many of the states that spend the most per pupil have the lowest test scores, says a recent Heritage Foundation study.

One problem is that public-school bureaucracies absorb money long before it reaches the classroom. Yet pouring even more funds into an inefficient system won't guarantee better results. Consider a five-year experiment completed in June by the Annie E. Casey Foundation. It committed about $40 million to four cities with a high proportion of disadvantaged youths. With the windfall, the cities—Dayton, Little Rock, Pittsburgh, and Savannah, Ga.—aimed to raise test scores and fix other inner-city problems. But aside from a slight lowering in dropout rates, which tracked a nationwide decline, the experiment "didn't produce significant changes in the institutions or student outcomes," says Gary Wehlage, associate

THE FIGHT OVER PUBLIC SCHOOL FINANCING



irector of the Center on Organization & Restructuring of Schools, who studied he program.

A key reason: Most of the schools' practices stayed the same. While some chools added after-school programs, for xample, they didn't change the regular urriculum. Says Wehlage: "Money spent olishly doesn't make any difference."

Houston's Hollibrook Accelerated Elementary School shows that schools can o more with less. Some 85% of the stuents are from non-English-speaking omes. And the cash-strapped school pends far less than Texas' annual averge per pupil of $3,939.

Despite such obstacles, Hollibrook stuents have made significant gains. Five ears ago, its fifth-graders' mean scores or reading, math, and social studies vere, by national norms, only at the evel of the eighth month of third grade. Today, students are performing at grade evel. Based on the work of Stanford University economist Henry M. Levin, he improvements also followed innovaions introduced by a new rincipal, Suzanne Still. Instead f spending more, she reallo-ated the resources she already ad. For example, teachers now nove with students from one grade o another, which eliminates days vasted adjusting to new instructors ach September. The program, now eing used in some 500 schools in 35 tates, also requires extensive parental nd community involvement.

OUGH GOALS. Other experts agree that uch influences as teacher ability and arental support are key factors affectng student performance. Costly efforts, uch as smaller classes, have not yielded onsistent educational gains, says econonist Eric A. Hanushek of the University f Rochester, who has studied the link etween spending and achievement.

In the face of such evidence, taxpayrs and business groups are calling for a otal restructuring of the nation's chools, along with funding reforms. But weeping changes in Kentucky show ow tough such a goal can be. In 1990, Kentucky lawmakers mandated such adical measures as school-based mangement and merit pay for teachers and rdered the state to fund them. The tate has complied—until now. With Kentucky facing a budget shortfall of p to $300 million, the education deartment expects a 2% cut in its $2.2 illion budget. That could slow reform his year, and further cuts could threaten future efforts. As the debate over ow to improve education rages on, it's lear that money cannot be divorced rom finding a better way to educate ur kids.

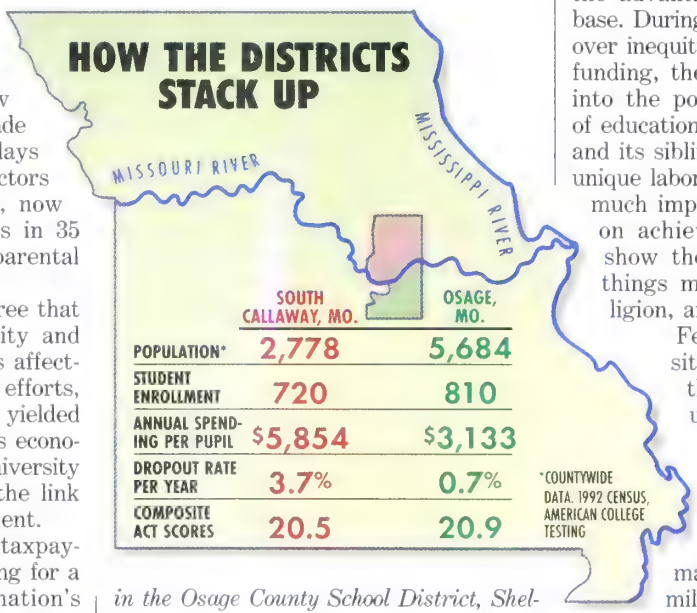
By Stephanie Anderson Forest in Dallas, with bureau reports

A TALE OF TWO SCHOOL DISTRICTS

In Missouri, a poor area's students outperform richer neighbors

It's just before noon in Mokane, Mo., and pianist Todd Becker is busy composing an orchestral score in South Callaway County High School's state-of-the-art band room. Sitting behind a synthesizer, Becker glides his fingers across the keys while each sound is recorded into a Macintosh computer. "Some kids take the facilities at this school for granted," says Becker, age 18, who will attend the University of Missouri at Columbia this fall on a music scholarship. "Me? I've always taken full advantage of what this school has to offer."

Four miles across the Missouri River in the Osage County School District, Shella Keilholz, an aspiring engineer, is sitting in one of the unairconditioned classrooms at Fatima High School. The 18-year-old Keilholz doesn't have the luxury of learning on high-tech gizmos. On this day, her physics teacher is explaining the laws of motion by rolling plastic balls down a toy racetrack. "We might not have the sophisticated equipment that South Callaway has, but our teachers do a pretty good job with what they have," she says.



HOW THE DISTRICTS STACK UP

	SOUTH CALLAWAY, MO.	OSAGE, MO.
POPULATION*	2,778	5,684
STUDENT ENROLLMENT	720	810
ANNUAL SPENDING PER PUPIL	$5,854	$3,133
DROPOUT RATE PER YEAR	3.7%	0.7%
COMPOSITE ACT SCORES	20.5	20.9

*COUNTYWIDE DATA. 1992 CENSUS, AMERICAN COLLEGE TESTING

For years, the neighboring counties of South Callaway and Osage were much the same. Tucked quietly amid the rolling farmland and dusty back roads of central Missouri, the two poor communities struggled to hold on to their farms, factories, and schools, as residents migrated to big cities for higher-paying industrial jobs. But in 1979, South Callaway's fortunes changed. Union Electric Co., based in St. Louis, began building a nuclear power plant in the county, creating a windfall of local property taxes with which to fund its ailing school district. Almost overnight, the district's annual funding shot from $240,000 to $3.2 million. Osage's has remained flat at just above $800,000.

Today, South Callaway County High School, a sprawling college-like facility, is more than just a gleaming testament to the advantages of a rich property-tax base. During a time of growing litigation over inequities in America's public school funding, the school provides a glimpse into the possibilities—and limitations—of educational spending. South Callaway and its sibling district, Osage, provide a unique laboratory in examining just how much impact funding disparities have on achievement. The districts also show the influence on education of things money can't buy: family, religion, and community support.

Few issues strike a more sensitive chord among educators than the role of money in education. From Alaska to Louisiana, debates over how to fund public schools are raging. Missouri is no exception. After months of fiery discussion, state lawmakers recently passed a $315 million tax increase to finance a new school-aid formula. The bill follows a court ruling declaring the state's school-financing system unconstitutional because of its failure to provide an "equal opportunity" for each child.

Critics of the law argue that redistributing funds will do little to improve schools. Other socioeconomic factors such as family wealth, parental educational level, and household stability are the ultimate factors driving a school district's success, says John Alspaugh, an education professor at the University of Missouri at Columbia. "Money cannot buy student achievement," he says.

It hasn't in South Callaway. Over the past decade, the district has plowed $15 million into its one elementary school, one middle school, and one high school for everything from a $1 million agricul-

ture center to a state-of-the-art theater. But such spending has yet to yield the scholastic gains officials had envisioned.

Even more, South Callaway can't seem to pull itself above poorer Osage, which has one high school and three elementary schools, on such benchmarks as standardized test scores (table, page 63). The most recent American College Test scores show that Osage's Fatima High School averaged 20.9, compared with South Callaway High's 20.5. While both districts are below the state average of 21.0, South Callaway is slightly below the national average of 20.6.

Test scores are a sore topic on both sides of the Missouri River. South Callaway officials downplay standardized tests as an incomplete barometer of their district's performance. Says Linda Hall, school board president: "What's important is that we're producing well-rounded, free-thinking individuals." Osage Superintendent Rex Miller, conversely, worries that his district's test scores might imperil his chances of securing badly needed funding. Before joining Osage, Miller spent three years as South Callaway's superintendent. He resigned in July, 1991, because of conflicts with the board. "Our scores would be even higher if we had the money South Callaway has," Miller says.

NO-SHOW PARENTS. Maybe so. But it's also clear that school funding plays a smaller role in the districts' academic performance than either cares to admit. South Callaway has only recently begun to take a hard look at its curriculum with an eye toward boosting performance. Instead, the district has focused mostly on bricks and fancy computers. And community-oriented ideas advanced by the UE families often clash with South Callaway's traditions. Ask Anita Stuckey, president of the Parent Teacher Organization, who relocated to South Callaway with her husband, a UE environmental technician. Stuckey says her recent effort to organize a book fair was nearly derailed by natives bent on buying books the old way: through mail-order catalogs. Book fairs, many argued, cost too much and required too much parental involvement.

In South Callaway, parent participation is a real problem. The district has 320 elementary school children, but only about 20 parents attend the PTO's monthly meetings. Stuckey says that parents associated with the UE plant often wind up carrying most PTO activities, and there's resentment about that.

Osage, in contrast, offsets its scant resources by sharing the burden with church, family, and civic groups. For years, Osage's Parent Teacher Organization has hawked homemade pizzas to pay for everything from crayons to computers. Says Jim Friedebach, director of assessment for the Missouri Education Dept.: "When you have a community with very high expectations for its kids, that has a powerful influence."

And, unlike South Callaway students who begin school in public schools, most Osage students spend their early years attending one of five Catholic elementary schools, where teachers stress religion and a strong work ethic. "The students here know their limits and they know what's expected of them," says Beatrice Prenger, a third-grade teacher at St. Joseph's elementary school.

SOUTH CALLAWAY HAS THE HARDWARE AND THE FAT BUDGET, BUT NEIGHBORING OSAGE'S KIDS PULL DOWN HIGHER SCORES ON STANDARDIZED TESTS

South Callaway and Osage, both traditional farming communities, have each been hit hard by industrialization in nearby cities. South Callaway, though, has been affected more visibly. A community of 2,676 residents, nearly 25% of whom never completed high school, South Call away's heyday spanned the early 1900 to mid-1950s, when farming and railroading spurred a bustling downtown. But by the late 1950s, industries ha begun fleeing to St. Louis and Chicago. South Callaway's cultural fabric—civi organizations, watering holes, and socia groups—began to disappear.

FLIGHT OF BUSINESS. Today, despite a median household income of $33,752, o about $4,000 more than Osage, Soutl Callaway's business district is a skeleton Many buildings have been torn down leaving a few shops, a bar, and a Methodist church in between. South Callaway residents still rely mainly on farming for income, while some commute to the nearby state capital of Jefferson City t work clerical jobs. But a once-thriving construction business disappeared with the completion of the UE plant, and the unemployment rate now hovers nea 6%, compared with 1.2% in Osage. Says City Clerk Dee Pfeiffer: "We don't have much building around here any more."

Businesses have fled Osage, too, but a core manufacturing base has kept unemployment low. A strong sense of community also remains, nurtured by its more tight-knit, homogeneous population. Most Osage residents are descendants of four German families who along with a German missionary, settled the area early in the last century. The Catholic church remains strong.

If the church bonds Osage, the high

ELEMENTARY-GRADE PUPILS FILE OUT OF THEIR FOUR-ROOM OSAGE COUNTY SCHOOLHOUSE ON THE WAY TO PUT ON A PLAY FOR THEIR PARENTS

chool has bonded South Callaway. Vhen UE approached it about building ne plant, residents jumped at the nance, despite the nuisance of living vith a nuclear-emergency test alarm nat beeps daily in their homes.

Because of the plant, South Callaway oosted annual spending per student rom about $1,100 to $5,854. That's nearly twice as much as Osage's $3,133. It also took its students out of trailers and put them in new buildings. And while some Fatima High kids read from 15-year-old textbooks and jockey for time on the school's 15 computers, South Callaway kids enjoy the latest edition textbooks and 100 laptops they can sign out. The school even has an industrial-technology class, where students use computers to design the likes of solar-powered vehicles. Boasts South Callaway Superintendent Paul Skeans: "We no longer teach wood shop. We teach robotics."

Life for teachers in South Callaway has improved, too. Class size in the district averages a comfortable 17 students, compared with Osage's more unwieldy 27. South Callaway teachers also earn about $6,000 more annually and enjoy full health benefits, plus tuition reimbursement. Each month, Osage teachers fork over an extra $80 for their health insurance.

Such financial pressures are taking a toll. With Osage having to fight harder each year to maintain its academic standards, teachers are becoming frustrated. Often, they're forced to dig into their own pockets to buy materials. When they spend the district's money, they risk being penalized. Fatima's high school principal has put off buying computers for two years because doing so would mean cutting down on the number of teachers.

CHANGES AHEAD. Osage special education teacher Shelly Woodson, for one, has had enough. Since joining Osage in 1989, she has had to buy supplies with her paycheck, and lately she has been worried about job security. And Osage teachers haven't had a pay raise in three years. But in September, Woodson won't have those problems. She will be teaching special ed in South Callaway.

Other changes lie ahead. With Missouri's new school-financing package, Osage expects to get another $400,000 per year by 1997. That will require the district to pass a local tax increase of $100,000. But that money won't begin to reverse decades of decline. "It's not enough," says Superintendent Miller.

South Callaway, even with a $17 million nest egg, complains that it, too, has financial problems that need addressing. The biggest one: Nuclear plants are temporary. UE recently told the district that it would begin depreciating the plant by 4% a year—which adds up to about $120 million in lost tax revenues over the next 15 years. In 30 years, the plant will close, UE has said. About 92% of South Callaway's school funding comes from UE. Because UE has announced no plans to build another plant, the district may have to raise taxes and increase its reliance on state funds. The school board, anticipating tougher times, last year hired Superintendent Skeans, a fiscal conservative with experience in poor districts. His mandate: making better use of the district's resources, and boosting student achievement. So far, he has initiated a year-long study of the district's curriculum, linked graduate education to teachers' pay, and is mulling a special program for gifted kids.

For now, money is still the least of South Callaway's problems. Yet fights over how to spend it continue to haunt the district. Often, the brawls focus on issues that have little to do with improving the schools. The latest squabble: how to spend donations raised through Olympic Day athletic events. Hosted by elementary school students, Olympic Day raised $3,300 last year. But some parents are still fuming because $2,000 went to high school seniors instead of elementary kids. Anita Stuckey, PTO president, says she's trying to ease tensions this fall by combining the annual membership drive with a pot-luck dinner or dessert party. "Around here, there'll always be some haggling over money," Stuckey says. "But maybe this will relax parents and encourage them to get more involved." That's only part of the equation. The district must also make its technology an integral part of the curriculum. Teachers, too, should be retrained to adapt old methods to the new equipment. And everybody in the district should be held to higher standards. If not, South Callaway students will only go as far as new books and shiny buildings can take them.

By Ron Stodghill II, in South Callaway and Osage Counties, Mo.

PHOTOGRAPHS BY ELI REICHMAN

WOMEN

A DIFFERENT KIND OF LAUNCH FOR McDONNELL

A new program is catapulting women into the political arena

For years, ambitious women at McDonnell Douglas Corp. have felt frustrated. In the not-too-distant past, even an innocent gathering of female employees might have caused suspicion. "If three or more women got together for lunch, the guys in blue suits and red ties would believe we were planning a coup," remembers former aerospace employee Ruth Jernigan, now a United Auto Workers official.

Just surviving in that corporate jungle left women little time to pursue outside activities that might boost their careers, such as politics. "The men only have seven-day weeks," says Elizabeth B. Karabatsos, ombudsman for McDonnell Douglas Helicopter Co. in Mesa, Ariz. "Women have eight-day weeks." No wonder focus groups show that corporate women see little career advantage in civic, charitable, or political work. And even those interested in politics must overcome old-boy networks and exclusive social events. "It's those institutional and cultural barriers for women—the golf club, the business luncheon," complains Renee P. Handler, general manager for communications at Douglas Aircraft Co. in Long Beach, Calif.

RIPPLE EFFECT. Today, those stumbling blocks are fast disappearing, so much so that McDonnell Douglas has teamed up with the National Women's Political Caucus to encourage female employees to enter the political arena. This unlikely partnership is attempting to change both male and female attitudes. "We've stood on the outside for so long saying, 'Politics is dirty. We can't get involved,'" says Christine Todd Whitman, the Republican nominee for New Jersey governor. "That's what we can't allow." On July 8, she gave a pep talk to the McDonnell Douglas women participating in the pilot program.

Advocates argue that the program provides benefits to both participants and their employers. It increases the clout of businesswomen by putting them in touch with local and national officials. That—plus their very involvement with important corporate issues—help women advance their careers. By changing the attitudes of corporate women toward politics, it deepens the pool of talented women in the political world. And if other companies follow McDonnell Douglas' lead—NWPC is talking with an oil company and a food company, among others—the results could ripple through America. "We have a natural vehicle that others can adopt," says James H. MacDonald, McDonnell's senior vice-president for Total Quality Management.

OPERATION CLOUT: KARABATSOS AND LOUCKS

Launched in February, the McDonnell program already has some success stories. Cathy Loucks, director of strategic planning for McDonnell Douglas Helicopter, volunteered for a local government panel and was later asked to chair Mesa's downtown development committee. "When I first got into it, I didn't know whether it would be worth my time," she recalls. Now, she's sure she made the right move. She has learne how to put together a problem-solvin team and work to attract business, le sons that could help her at the office.

Strategists of both major parties, wh view politically savvy businesswomen a future winners at the ballot box, ar anxious to see more of the same. The reasoning: With voters yearning for ou siders to seize the reins of governmen both women and business leaders ar often viewed as fresh and untainte "Women business leaders are incredibl sources of new talent," says Washin ton Democratic consultant Maura Brue er. What's more, voter attitudes no lon er handicap female candidates. A 199 Times Mirror Center for the People the Press survey found that a hypothe ical female business leader outpolled hypothetical male executive by 10 pe centage points.

For Corporate America, the time ma be right for such an outreach program In these days of economic uncertainty defense cuts, and stiff international com petition, traditionally apolitical compa nies can no longer maintain a cool dis dain for the grimy world of politics "They need all the friends they can get, says Women's Political Caucus President Harriett Woods, a former Democratic lieutenant governor of Missouri. "Cor porations are beginning to realize that they can't be arrogant just because they're the biggest guy on the block."

Business leaders see a public-relations benefit to having women executives spread the corporate message, whether by serving in public office or networking with elected officials from city hall to Capitol Hill. "We want to be where the rubber meets the road," says Janet Wit-

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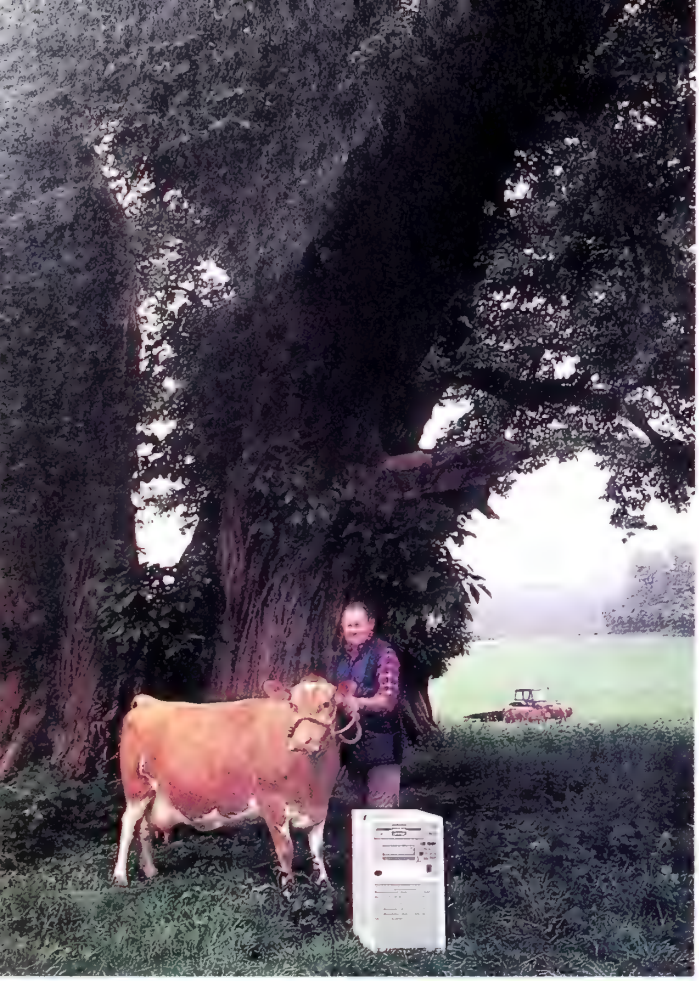
[1] Each fund's 3% sales charge has been waived through May 31, 1994. [2] Morgan Stanley Capital International. The chart shows the average annual returns of the S&P 500 and the Emerging Markets "Free" Index as measured in U.S. dollars without reinvestment of dividends for the five years ending May 31, 1993. Past performance is no guarantee of future results. [3] For more complete information, including management fees, redemption fees and expenses, call for a free prospectus. Read it carefully before you invest or send money. Fidelity Distributors Corp



DE LA VIERGE - VIENNOISERIE
BOU

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tenauer, McDonnell Douglas' director of executive development. For the St. Louis-based corporation, the project already has paid dividends. At the recent NWPC convention in Los Angeles, its women lunched with Attorney General Janet Reno and Senator Dianne Feinstein (D-Calif.) and hobnobbed with powerful political insiders of both parties.

The training program is open to McDonnell's top 50 female managers. Twice this year, participants gathered to hear from officeholders, political consultants, and corporate officials and to attend seminars on public-policy issues that affect the company, such as soaring liability-insurance payments. State and local chapters of the Women's Political Caucus also work with the McDonnell executives, introducing them to a network of contacts at that level.

MALE SKEPTICS. The program represents quite a change for male-dominated McDonnell. Even though it has the company's official blessing, some insiders say that a few male employees are skeptical about a program designed to assist only women. "It's a little scary and intimidating for some of the men," says Bonnie W. Soodik of Huntington Beach, Calif., the only woman in the company's vice-presidential ranks. "But it's been intimidating for women forever."

And the intimidation doesn't end with victory at the polls. When Republican Patricia Secrest, co-founder of a small automotive-parts company, was elected to Missouri's House of Representatives in 1990, the GOP floor leader issued a warning about her male colleagues: "They aren't going to like pushy businesswomen asking questions." Undeterred, she helped shape a workers' compensation compromise to lighten the burdens on small companies—but not before a male lobbyist pinned her against a wall and "threatened to put his fist through my teeth," she recalls.

It was the 1991 clash between Supreme Court nominee Clarence Thomas and former aide Anita Hill that caused businesswomen to question the wisdom of their exile from politics. "A lot of women in the business community began to notice for the first time how few women are in the House and Senate," says Lynn Shapiro, executive director of WISH List, which raises money for pro-choice GOP women candidates.

Republican consultant Carol Whitney, who directed a recent Los Angeles training session for the McDonnell Douglas women, predicts that several of her star pupils will win public office. That could mean profound changes in women's politics, which has been dominated by community activists, teachers, and lawyers. That's a benefit to business that no public-relations campaign could buy.

By Richard S. Dunham in Los Angeles

ENGINEERING

COMING OFF THE DRAWING BOARD: BETTER ENGINEERS?

Curriculums shift so industry gets the sort of graduates it needs

As an Apple Computer Inc. engineer in the 1980s, Joe Wujek recruited dozens of engineering students—and didn't like what he saw. Science-heavy studies and narrow specialization had left the new prospects without the skills to design products that mix mechanical and electronic components. And intense classroom competition between individual students was poor preparation for Apple's team approach to engineering.

Today, at 60, Wujek is trying to bring a real-world flavor to academia. At the University of California at Berkeley, where he now teaches, Wujek assigns students practical problems, such as building an easy-to-program VCR. His design class last spring broke with a hoary rule that barred freshmen lacking prerequisite studies from taking courses alongside seniors. Now, he has senior "managers" learning management skills by overseeing the design work of freshmen "engineers." And he has his students negotiate their grades with him—to prepare them for future salary wrangles.

MATH DIET. Groundbreaking moves such as Wujek's are leading the most dramatic change in engineering education since the late 1950s. Back then, U. S. schools responded to the Soviets' Sputnik launch by adopting a science-heavy curriculum. Ever since, engineering students typically have spent their first two years on a heavy diet of math, physics, and chemistry, then entered a specialty such as aerospace, chemical, mechanical, or electrical engineering. And the best students were often channeled into research careers. That alignment helped the U. S. build the rockets, solid fuels, and computers needed to land a man on the moon. And it helped propel the U. S. into the lead in new technologies—from computers to high-tech weaponry.

Now, however, the end of the cold war plus fierce global competition are redefining the nation's priorities. At the same time, the pervasive impact of electronics and other advances is blurring the differences between engineering specialties. To design electronics-laden cars and many other products, industry now wants engineers with both electrical and mechanical skills. Aware of such changes, one-third of the nation's 330 engineering schools are revamping their programs to make them more practical and responsive to industry. "This is a fundamental redesign of engineering education," says Robert Zemsky, co-director of the National Center on the Educational Quality of the Workforce.

Elite schools are leading the way. To stress practical skills, Stanford University, the University of Michigan, and

ıers have begun master's degree pro-
ıms requiring the completion of design
ɔjects rather than the traditional re-
ırch thesis. In September, Berkeley
l start a four-year "mechatronics" pro-
ım that merges traditionally separ-
mechanical and electrical engineering
ıdies. Responding to a 1990 survey of
technology experts in industry and
vernment, Massachusetts Institute of
chnology's aerospace department re-
ed its curriculum to combine structu-
and propulsion engineering with new
ırses in statistics and computer sci-
:e tailored for engineering managers.

IELY LESSONS. In another key change,
ne schools have begun teaching math
d science within engineering courses,
her than in separate first- and second-
ar classes. Carnegie Mellon Univer-
y now teaches differential calculus as
rt of a new sophomore electrical engi-
ering course. Officials insists that such
anges aren't meant to deemphasize
ıth and science. Instead, this "just-in-
ıe" approach means students learn cal-
ıus or chemistry in the context of en-
ıeering problems—rather than re-
iring them to recall the concepts from
lier courses. Administrators also hope
will help engineering schools—whose
rollments have dropped in the past
cade by 13%, to 382,000—retain stu-
ents who might switch majors out
frustration at having to take so many
erequisites before they can learn
gineering.

Industry, meanwhile, is seizing what it
ews as an unusual chance to shape its
ture employees. "The people respon-
ole for establishing curriculum are
ore open to working with industry
than they have ever been," says Patrick J. Carroll, FMC Corp.'s director of corporate technology. He helped coax Stanford into developing programs that mix business school courses in management and budgeting with advanced engineering. And current and former executives from Boeing, Digital Equipment, Ford, and other companies are on campus, teaching such courses as spacecraft design at Stanford and manufacturing at MIT.

Four industry-academic consortiums, funded by the National Science Foundation, are pushing the curriculum changes. Some 34 schools are involved, including MIT, Stanford, California Polytechnic State University, and Howard University. One NSF coalition brought together workstation maker Sun Microsystems Inc. with Cornell University. Last October, Sun's manager of engineering education, G. Jeffrey Arnst, suggested developing courses based on standard computer programs that combine civil, architectural, and structural engineering. "This is the technology the real world is using. It's the experience I want to see when a student graduates," says Arnst. Cornell civil engineering professor Anthony R. Ingraffea agrees that academia needs to "reintegrate" its overspecialized disciplines to give students the mix of skills industry seeks.

THE MAIN IMPEDIMENT TO CHANGE: DECADES-OLD UNIVERSITY PRACTICES

The main impediment to that has been the inertia of decades-old university practices and cultures. For instance, in order to mix seniors and first-year students—which the school had ruled out to keep freshmen from getting in over their heads—Berkeley's Wujek had to create two separate courses that meet in the same room at the same time. Challenging MIT's do-it-yourself-or-die philosophy, department head Earll M. Murman lets his aerospace students work together on homework—as long as they acknowledge the collaboration. Stanley V. Jaskolski, chief technology officer at Eaton Corp. in Cleveland, thinks this makes sense: "The major issue facing academia today is the need to produce students who understand the techniques for teaming to produce a product."

Even administrators are challenging longstanding rules of standardized engineering education. Last year, more than a dozen schools threatened to withdraw from the Accreditation Board for Engineering & Technology (ABET), whose rules require that engineering students take a specific number of math, science, and engineering courses. The schools wanted ABET to accept courses that blend these disciplines, says Carnegie Mellon engineering dean Stephen W. Director. For example, CMU's new course that teaches calculus within engineering wouldn't count toward meeting math requirements under ABET's current rules. "We said this is our program. If you don't want to accredit it, we'll do it anyway," says Director. Now, an ABET committee is considering overhauling the rules to allow the more flexible curriculums.

OLD HANDS. The pressure for change is likely to grow stronger. Cost-cutting and competition mean industry can no longer afford to train freshly minted engineers in practical skills they didn't get in school. "Industry now expects the universities to provide someone capable of doing design work and process technology," says Arden L. Bement Jr., former TRW vice-president for science and technology, who now teaches engineering at Purdue University. Moreover, some executives say the proposed curriculum changes don't go far enough. "Universities may take a group of six engineers and call it a team," says Frederick J. Kovac, vice-president for technology business planning at Goodyear Tire & Rubber Co. "We think a team must be multifunctional," with marketing and finance students included, for instance.

The reform movement should gather force, too, as schools such as Berkeley, Cornell, Michigan, and others welcome a new group of students—practicing engineers from industry. Many schools are setting up programs designed to teach the latest advances to these pros, who typically take classes during work or after via videoconferencing systems. The engineers stay current, and their professors get feedback from the work world. That kind of contact with industry has also helped spark a curriculum revolution at business schools in recent years, notes Zemsky. "There's no going back to old patterns of how curricula are developed," he says. After all, the nation's competitiveness depends, in part, on the skill of tomorrow's engineers.

By Gary McWilliams in Boston

SOME CHANGES IN ENGINEERING EDUCATION

RNEGIE MELLON UNIVERSITY Has merged electrical and nputer engineering into a single degree program. Teach- students advanced math concepts as they need to apply m—rather than in separate math classes.

RNELL UNIVERSITY Is developing a combined civil and ɔtechnical engineering program. Plans case-study learning engineers.

IVERSITY OF CALIFORNIA AT BERKELEY Offers a new, r-year program in "mechatronics," merging mechanical d electrical engineering.

T Electrical Engineering & Computer Science Dept. has ated a master's degree for professional engineers, as s the school's Aerospace Dept.

IVERSITY OF MICHIGAN Has a new master's of engineer- degree program with its business school to teach man- ement skills to engineers.

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ThinkPad 350
What's inside
Processor: 486SL 25 MHz | Faster than a shrinking budget
Display: 9.5" monochrome | Big picture without big bucks
Weight: 5.2 lbs. (with battery pack) | Light on your wallet, light on you
Battery Life: 2.6 to 9.3 hours† | Get ready for the longest power trip of your life.
PCMCIA: Type II (2.01) slot | Adapters the size of a credit card.
Hard Drive: 125MB or 250MB | Store all of your deepest thoughts.
Price: $1,999.00 for 125MB†† | Who says power has its price?
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'ED BY RUTH COXETER

HIS GIZMO HELPS FIREFIGHTERS VOID A MELTDOWN

Hazardous-waste workers and firefighters face a similar foe: Inside their suits, body heat builds up, and natural cooling mechanisms can shut down. Heat-stress symptoms range from cramps to nausea, confusion, and coma. So Larry Berkbigler, a researcher at Los Alamos National Laboratory, has invented a one-pound monitor that easures skin temperature and heart rate. A light flashes inle the visor of a worker whose body temperature climbs too gh. Meanwhile, radio waves send temperature and heart-rate ta to a monitoring station up to a quarter mile away, where supervisor logs the data on a personal computer.

Los Alamos is seeking a company to bring the system to arket. It will soon test the units with its own chemicalill cleanup team and with outside fire departments. The esnated cost to manufacture the system: approximately $500 r transmitter and $7,000 per monitoring station.

GREEN MERIT BADGE OR MANUFACTURERS

America's manufacturers are increasingly embracing a set of international standards, dubbed ISO 9000, that encourage cellence in everything from design to quality control. Now, e International Standards Organization, which created ISO 00, is working on new standards to promote environmental- sound manufacturing and products. Some experts believe ese new standards may prove more important than ISO 00—and could give U. S. companies a leg up.

The initiative, explains John Donaldson, chief of standards de and information at the National Institute of Standards & echnology, "grew out of industry's recognition that environentalists carry weight." In response to interest from business rior to last year's Rio de Janeiro environmental summit, O set up a committee to hammer out principles of environental management. Companies that meet the standards will e able to label their products as "environmentally sound"—a otentially valuable marketing tool. Since U. S. companies already meet tougher environmental regulations than most forgn rivals, speculates Donaldson, "such standards may give em a competitive advantage."

NE WAY TO LIMIT DVENTURES IN BABY-SITTING

Parents who worry about the quality of their child care may soon have a Big Brother to leave behind: a camouaged video-surveillance system called Babywatch. Develped by Total Recall Corp. of Spring Valley, N.Y., in conjuncon with Sony Corp., it consists of a somewhat inconspicuous eckled white box, 11 inches long and 4 inches tall, that olds a camera and a screen on which to view the tape. Up to five hours of video and audio can be recorded—making for fascinating viewing as the baby-sitter flips channels and calls friends. With an adapter, the tapes can be played on a VCR.

Total Recall President Jordan Heilweil says the Sony camera's ability to record in low light makes it ideal for surveillance. He claims that the camera's wide-angle lens is virtually undetectable because it is as small as the speckles. Heilweil figures the system would be too expensive to buy, so he plans to rent the units at $199 for three days—probably long enough to calm your fears about your child-care help.

CAN SILICON BE TURNED INTO THE TEENIEST TRANSISTORS?

Make transistors small enough, and all kinds of good things happen. For example, if a transistor can be shrunk to 0.1 micron wide, or 0.1% the diameter of a human hair, electrons will shoot across it without bumping into lots of other subatomic particles. These collisions are what slow down signals in chips and generate most of the heat. Thus, tighter dimensions may yield chips that process data at superfast speeds without creating so much heat that they melt.

Until recently, physics seemed to rule out 0.1-micron transistors in silicon, so research focused on gallium arsenide. But a new concept for making supersmall silicon transistors has been developed by Raphael Tsu, a solid-state physicist at the University of North Carolina and the chief researcher of New York-based Nanodynamics Inc. The key is putting an ultrathin layer of silicon dioxide insulation under the transistors, which keeps the electrons in check until a signal arrives. This layer must be only a couple of atoms thick; otherwise, its crystalline structure won't match up with the silicon, and the two materials will peel apart, destroying the transistors. Tsu's idea is more than just a theory. Nanodynamics has built prototype equipment that has produced 0.1-micron transistors by printing on silicon with X-rays instead of light.

JAPAN WANTS TO REPLACE EVEN THE DRIVER WITH A CHIP

In Japan, where 123 million people are crammed into a space the size of Montana, traffic can be a nightmare. So the Tokyo government wants to make highways and vehicles not just "smart" but autonomous—with computers taking the wheel when traffic gets tough.

Japan's Advanced Road Transportation System is no more advanced than research in the U. S. and Europe, but the Japanese seem far more eager to discuss the ultimate outcome: cars that rebel against human drivers to become cogs in a mass-transit machine. Researchers at Japan's Construction Ministry expect the first step—an alarm system that warns drivers of hazards such as tailgating—to go into testing around 1997. By the year 2000, Japan will test automatic braking and steering in emergencies. And by 2010, it will begin testing automatic driving. Japan's goal is international standards that will make autonomous cars mandatory in urban areas by the middle of the next century.

INSURANCE

THE HURRICANE CALLED SUPERFUND

Cleanup claims could hit $1 trillion—and batter insurers

What scares insurers more than the specter of another Hurricane Andrew? To any insurance executive, the answer is easy: Superfund claims. Natural disasters get most of the publicity. But claims stemming from environmental cleanups mandated by the 1980 Superfund Act pose a huge threat to industry earnings—and perhaps even to the solvency of some companies.

Pollution claims have been dogging the industry for years, and many major insurers have paid out or put into reserves hundreds of millions of dollars. But the hit, it's becoming clear, could be much higher than nearly everyone in the industry expected. Insurers could end up paying more than $1 trillion for Superfund claims over the next 50 years, according to Tillinghast, the New York-based actuarial consulting arm of Towers Perrin. That's the equivalent of about 60 Hurricane Andrews.

Despite the millions put aside, insurance companies are seriously underreserved, say analysts. "If Superfund was to get very aggressive in cleaning up sites, it could potentially jeopardize or impair some of the big household names," says John H. Snyder, a senior vice-president at A. M. Best Co., the ratings agency.

The size of the hit is not yet appreciated by most investors. Says one major institutional investor: "Environmental claims aren't in their stock prices." Snyder predicts that Superfund claims will have more of an effect on stock prices in the next couple of years, when Superfund costs begin mounting into billions of dollars for certain companies.

"DEEP POCKETS." The main cause for the surge of claims is that courts are increasingly ruling that insurers' liability policies cover pollution costs, even though insurers maintain that policies never envisioned such exposure. The industry is working feverishly to draft reforms to Superfund, which must be reauthorized by Sept. 30, 1994.

With a total of $160 billion in surplus held against future claims, both natural and manmade, insurers have long complained that they've been targeted as the best available "deep pockets" to pick up the cleanup tab. "If we have to use our $160 billion in surplus to pay for Superfund, we're out of business," says Donald R. Frahm, ITT Hartford Insurance Group's chief executive officer, who is leading the industry's reform drive.

The industry's vulnerability to pollution claims derives from court interpretations of a clause in most liability policies that requires insurers to shell out for "sudden and accidental" events. That language was supposed to exclude paying for cleanups unless, for example, a bulldozer ran over 20 barrels of toxic waste. But U. S. courts have been ruling that "sudden and accidental" includes chemicals slowly dripping out of containers for more than a decade. "Clearly, one of the major threats to the solvency of property and casualty insurers is the risk of contract reinterpretation that could impose enormous unforeseen environmental cleanup costs," Securities & Exchange Commission member Richard Y. Roberts said in an April speech. Recent court cases have not heartened insurers, many of whom had expected 50-50 odds. Instead, they're now losing about 70% of the time.

INDUSTRY BAILOUT? Insurers and rating agencies are struggling to get a handle on the industry's eventual exposure. To assemble a data base, A. M. Best is requiring insurers to provide exposure information. And the SEC is intensifying its effort to require companies to make greater disclosure of environmental claims, taking an especially hard look at the potential environmental liabilities of insurers. Yet on the other hand, some companies are afraid to set aside large reserves, fearing that could be used against them as an admission of guilt in court. And because reserves are charged against pretax earnings and reduce tax liability, the Internal Revenue Service takes a dim view of insurers setting aside money to cover pollution cleanups unless the need can be documented.

Just about everyone agrees that the Superfund law needs to be modified. Of the $15 billion that has already been spent on Superfund cleanups, roughly 75% has gone to legal fees and related costs. And fewer than 200 of the 1,300 sites have been cleaned. "If the money was going to cleanups, we'd have no

SUPERFUND CLAIMS: THE COST KEEPS RISING

AETNA

Added $202 million to reserves for environmental liability claims in 1992. Reserve now totals $231 million, up from $34 million in 1990.

CIGNA

Environmental pollution reserves have more than doubled, from $55 million in 1990 to $123 million at the end of 1992.

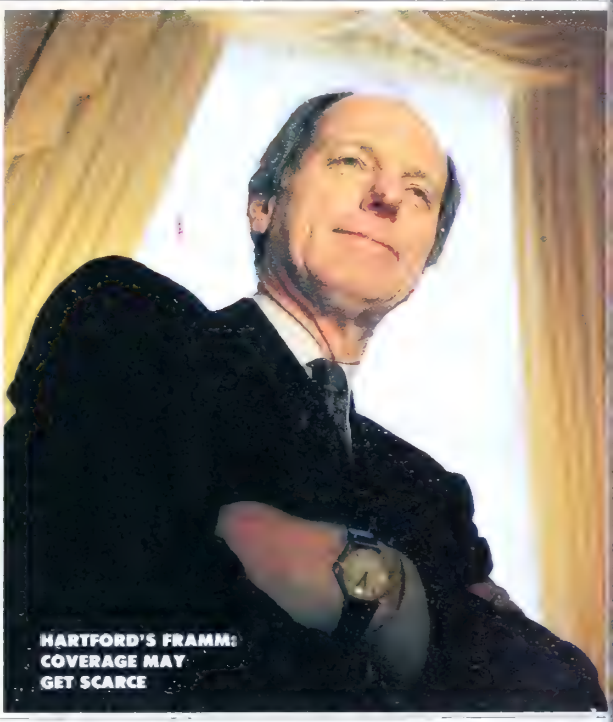
ITT HARTFORD

Moved $165 million into reserves in 1992 to pay for expected legal costs associated with environment-related claims.

TRAVELERS

Has paid out $127 million since 1990 for environmental claims. Keeps adding to reserves, which now total $194 million.

DATA: COMPANY REPORTS



HARTFORD'S FRAHM: COVERAGE MAY GET SCARCE

oblem," says C. David Sullivan, senior :e-president for claims at Kemper Na- nal Insurance Cos.

After failing miserably in an attempt get Superfund changed in 1986, insur- s are taking another tack in their re- nt campaign. This time, they're enlist- g the help of other business groups. 'his can't be viewed as an insurance lustry solution," says Frahm. As airman of the American Insurance sn.'s Committee on Superfund, he is shing for a broad-based fund to pay r pollution cleanups, an idea first es- used by American International Group c.'s chief executive officer, Maurice R. eenberg. It would be funded by busi- sses, insurers, and government and ould spread the brunt of cleanup costs. hy should noninsurers help out? If the w isn't changed, Frahm warns, liability verage will be more expensive and rder to get.

The proposal has its critics. Eugene R. nderson, partner at Anderson Kill ick & Oshinsky, which often repre- nts policyholders in suits against in- rers, refers to the trust-fund proposal "the insurance industry bailout." hile he believes that the Superfund w has to be changed, he fears that, nce "the rest of American industry is t organized and doesn't have the clout at the insurance industry has," the oposal will favor insurers. Greenberg ys such criticism is unfair: "Why is it insurance industry bailout? Why isn't a bailout of manufacturers or whoever se? We didn't pollute any sites."

RE VICTORY. One challenge for insur- s is getting the attention of Congress hile health-care reform is on the agen- . The Clinton Administration held its st high-level meeting on Superfund re- rm on July 9. And The White House fice on Environmental Policy has set an interagency task force to overhaul e program. The goal for a legislative ckage: Nov. 30. "That means Con- ess will be on a tight and difficult hedule," says Dennis Fitzgibbons, a okesperson for Representative John ngell (D-Mich.), who sent a letter to e Environmental Protection Agency king for the Administration's Super- nd proposal by Labor Day. Yet there e no easy, inexpensive solutions to the oblem, and many insurers fear Super- nd just won't get fixed.

Insurers did have something to cheer out recently. Twenty-three insurers, cluding Aetna, Continental, and CIGNA, on an appeal of a case that could have rced them to pay $750 million to clean a 9,500-mile pipeline from Texas to ew York. But such victories have been w and far between. Predicts Frahm: Ve'll be fighting this litigation for the st of my life."

By Chris Roush in Hartford

THE RUSSIANS ARE COMING —TO BANKING SCHOOL

They're learning the fine points at a Connecticut seminar

In the old Soviet Union, few Americans came in for more opprobrium than bankers. But times have changed. Last month, close to 250 Russians sat in Connecticut's Fairfield University auditorium and listened intently as Russian U. N. envoy Yuli M. Vorontsov remarked that David Rockefeller, former chairman of Chase Manhattan Bank, was "a very good example to follow in banking."

Those in the audience, hailing from Russia, Kazakhstan, and Belarus, were themselves bankers, settling in for a five-week stay at Fairfield to study banking, American style, under the aegis of the Russian-American Bankers Forum, a joint project of top American and Russian financiers and the Federal Reserve Bank of New York. "We're in a good position to give advice," says former New York Fed President E. Gerald Corrigan, alluding to the problems that have plagued American banks in recent years. "We know what to avoid." The program is part of a broad-based effort by Westerners to help the student bankers modernize their financial system.

There's a lot of work to be done. At present, simple transactions can take months to clear and payment orders, not checks, are the norm. Only a fifth of the 2,000 or so commercial banks in Russia have more than one branch, which makes putting together big-project loans difficult. And while computers are coming more into fashion, some computations are still made on an abacus.

SKEPTICS. U. S. efforts to help build a pilot check-processing system exemplify the challenges. The project is in Tula, a city south of Moscow, because it has a workable interbank communications system. The Russian transportation system can't handle the shipping of checks throughout the vast country, so the Westerners are working on ways to give customers electronic records of their checks.

Most of the Russians seem eager to pick the Americans' brains. Menatep, a Russian commercial bank, sent a computer programmer to Fairfield who, when he returns home, will teach 100 Menatep staffers what he has learned. But some are skeptical of East-West cooperation. Peter Derby, president and chief executive officer of Moscow's DialogBank, says the Central Bank of Russia's view "is that anyone who goes to the West just wants a trip and VCRs." Others feel the program may allow Americans to gain undue influence over the shape of Russia's banking system. The central bank is limiting foreign licenses. Although two American banks are applying for licenses, Crédit Lyonnais and the Bank of Austria are the only Western banks to have them.

If they don't want to rile the Russians, the educational ambassadors must step carefully. "We want to help our friends in Russia do what they think is right for Russia," Corrigan says. With luck, the Russians will take the lessons to heart—and shelve their abacuses.

By Kelley Holland in New York, with Peter Galuszka in Moscow

CORRIGAN (LEFT) AND U.N. ENVOY VORONTSOV

SCANDALS

PRU SECURITIES: A FINAL DEAL MAY BE ELUSIVE

States are not yet behind the SEC's proposed settlement

Finally, Prudential Securities Inc. Chief Executive Hardwick Simmons had an upbeat message to deliver. Talking to brokers on the firm's internal squawk box on July 16, Simmons said he was confident Pru was close to reaching a settlement with the Securities & Exchange Commission over its longstanding problems with billions of dollars in limited partnerships the firm sold during the 1980s. Investor losses exceed $1 billion. Simmons has said that by reaching a deal with the SEC and paying restitution to investors, which sources close to the firm say could be $400 million, the cloud over Pru Securities will quickly pass.

Unfortunately for Pru Securities, that could take a lot longer than Simmons thinks. The leader of a multistate task force of state securities commissioners that is independently investigating the firm says his group won't simply rubber-stamp any deal Pru Securities might reach with the SEC. While the task force is being briefed about the status of the SEC-Pru talks, "we have had no face-to-face settlement negotiations with Pru," says Wayne Klein, chief of the securities bureau in Idaho's Finance Dept. "So any talk about a global solution is just that: talk." SEC enforcement chief William R. McLucas declined comment, as is the agency's practice.

"SYSTEMIC PROBLEM." Klein declines to say how much state regulators expect Pru Securities to pay, though some states would like the total to be considerably larger than $400 million. William F. Jordan, an accounting professor at Florida State University in Tallahassee who has been retained as consultant by the state of Arizona, says $400 million is "hardly adequate. This was a systemic problem at Pru."

Moreover, Klein warns that if an acceptable settlement is not reached, several states may begin formal proceedings to bar Pru Securities from their states. That could be very damaging to Pru's business prospects. Following the guilty plea to federal fraud charges in 1985 by E. F. Hutton & Co. in a bank-overdraft scheme, several state regulators began actions to censure or bar the firm. Continuing negative publicity about those proceedings helped weaken Hutton, which was eventually taken over by Shearson Lehman Brothers Inc.

IDAHO'S KLEIN: ANY "GLOBAL SOLUTION" IS JUST TALK

WHY STATE REGULATORS MIGHT BALK

- They aren't participating in settlement negotiations between the SEC and Prudential Securities. Pru hopes most states will accept the SEC deal.
- Some states want Pru to pay restitution that would be more than the $400 million the firm is discussing with the SEC.
- The states are considering probing issues beyond those in the current settlement talks, including all of the 112 partnerships that Pru Securities helped manage as co-general partner.

DATA: BUSINESS WEEK

Further delays could arise from the states' investigations, which appear to be much broader in scope than the SEC's. Klein says the task force plans to examine all 112 limited partnerships that Pru-Bache not only sold but actively helped manage as co-general partner. All told, Pru-Bache sold $7.7 billion in 650 separate limited partnerships, Klein says. Today, those holdings are worth only a fraction of that amount.

Some states are also interested in the role of General Counsel Loren Schechter, the key negotiator for Pru Securities. Schechter was the top legal officer at what was then Prudential-Bache Securities during former Chief Executive George Ball's tenure. According to James J. Darr, then a key Pru-Bache employee, Schechter may have known about some of Darr's questionable private investments with a Dallas real estate developer. Darr headed the limited-partnership unit at Pru-Bache from 1979 to 1988.

WHO KNEW WHAT WHEN? Darr selected the real estate developers as sponsors for Pru-Bache partnership products, which were then sold to retail investors. A issue is whether Darr continued working with Watson & Taylor Realty Co., a Dallas real estate developer, because it would do the best job for investors or because the firm's principals let him in on private investment deals. George S. Watson denies any conflicts of interest.

In a recent interview, Darr told BUSINESS WEEK that he told Schechter about a number of Darr's private investments. "I discussed several of these transactions" with Loren Schechter, says Darr. "The statement is untrue," says a Pru spokesman, adding that "Schechter did not approve any investments that Darr made."

In his own defense, Darr says he does not view his private land deals as a conflict of interest. Nor were they particularly lucrative, he notes, pegging his pre-tax profits at less than $2,000 over 10 years on investments of more than $233,000.

Pru Securities insists that it is not underestimating the states' concerns and that it will start negotiating with them as soon as it completes a deal with the SEC. But based on the states' view of the impending deal with the SEC, Simmons' recent squawk-box talk on the limited-partnership mess will probably be far from his last.

By Chuck Hawkins in Atlanta with Leah Nathans Spiro in New York

'HE END OF A SUREFIRE TOCK PLAY?

/lutual thrift conversions" may no longer be big winners

■verything seemed to be going ■smoothly as First Federal Savings ■& Loan Assn. of Rockford, Ill., ared up to go public early last Octo-'. All the stock it planned to issue had en allocated to its employees and de-sitors, who are legally entitled to first s, and public trading was to start the xt day. But on the day before the ering, federal authorities alleged that uld-be outside investors, hoping to : in on what promised to be a great estment, had offered depositors as ch as $1,500 in cash to transfer their ck-purchase rights. The deal went ough, but the Feds confiscated the ighly 10% of the shares the outsiders l acquired. FirstRock, which cooperat- in the investigation, did not return one calls.

The thwarted investors had good rea- to be tempted. For the past 18 nths, so-called mutual thrift conver-ns—public stock offerings by thrifts eviously structured as mutual compa-s—have been among the best invest-nt deals around. Typically priced at gain opening prices, company shares ve risen as much as 50% in their first v days of trading.

The good times, though, may be draw- to a close. A spate of large thrift iversions is in the offing, and the od of new supply will hit the market at a time when thrift stocks' initial offering prices are rising. "This is a fool's game," says Richard M. Schapiro, a managing director at Salomon Brothers Inc. "Eventually, the cycle will complete itself, and people are going to get stung pretty hard."

STRANGE DEAL. Thrift conversions certainly have gained allure. Investment gurus such as Peter Lynch have lauded conversions as shrewd investments, and a herd of professional investors has been combing the country for thrifts that could soon convert to public ownership.

The pros' reasoning is simple: The rules on conversions almost dictate below-market prices for new thrift stocks because most of the shares are first offered to depositors, who have rights to the companies' equity in the event of liquidation. "It is the weirdest transaction in the world," says Benjamin B. Crabtree, an analyst at Dain Bosworth Inc. "You sell something to someone who already owns it." Naturally, depositors and thrift executives want the offering price to be as low as possible.

The result? Thrifts have come to market with shares priced at less than 60% of book value. Since shares of thrifts that have already gone public have been trading at price-to-book ratios closer to 100%, speculators have been bidding up newly issued shares quickly. That has attracted aggressive investors who try to open deposit accounts at thrifts considered to be likely candidates for conversion—and who, in the extreme case of FirstRock, allegedly try to buy depositors' nontransferable stock rights.

ERODING EDGE. As is usually the case, market forces are starting to squeeze out the surefire bonanza. More thrifts, including some big ones, are rushing to cash in. Green Point Savings Bank, based in Flushing, N. Y., is due to go public before yearend, a deal one of its underwriters, Adams Cohen Securities Inc., predicts will raise $800 million. That's more than triple the size of the next-largest deal of the past 18 months. A $250 million to $300 million offering for the Lake Success (N. Y.) Astoria Federal Savings & Loan Assn. and other deals could hit the market about the same time. "We're probably in a horse race" with Green Point, says George L. Engelke Jr., Astoria Federal's president and CEO. He adds, however, that "there are plenty of investors to absorb these offerings."

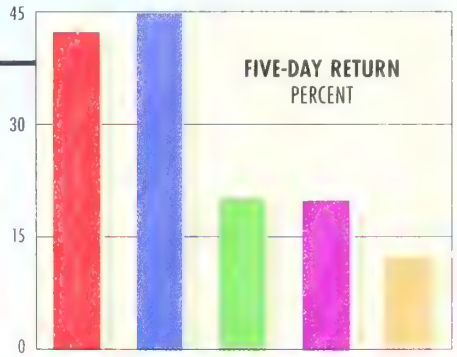
Meanwhile, the price-to-book ratios of new thrift stocks are gradually approaching those of currently traded stocks, because the offering price for new deals is based on the escalating trading prices of already-public thrifts. That, in turn, is eroding investors' quick gains (chart). Many newly independent thrifts, further, have been lackluster performers, prone to making safe but low-return investments.

Thrift conversions should still make money for investors, particularly if the overall outlook for banks and thrifts continues to improve. But the spectacular, surefire returns that led unscrupulous investors to FirstRock could soon be history.

By Kelley Holland in New York

IS THE PARTY OVER?

THRIFT	1993 OFFERING	INITIAL STOCK PRICE	PRICE FIVE DAYS LATER
FIRST SOUTHERN BANCORP	2/24	10	14 1/4
CORAL GABLES FEDCORP	3/31	10	14 1/2
FIDELITY NEW YORK	4/29	11 1/2	13 7/8
IPSWICH SAVINGS BANK	5/25	10	12
[illegible]	6/29	9	10 1/8



DATA: SNL SECURITIES, BUSINESS WEEK

BY GENE G. MARCIAL

FRESH LOOKS AND NEW FANS FOR ETHAN ALLEN

Farooq Kathwari really knows furniture. After acquiring Ethan Allen Interiors from Interco in a leveraged buyout in 1989, he jettisoned its stodgy Early American image by redesigning Ethan's products and stores. The more modern lines have been a big hit with buyers. So when Kathwari took Ethan public last March at 18 a share, all of the original investors, including General Electric Acceptance and Chemical Bank, held on to large stakes.

"As a producer and retailer of its own furniture, Ethan is a pure play in an industry that is just starting to consolidate," says a money manager at a Houston-based investment firm that snapped up a 4% chunk of the IPO.

He thinks Ethan could eventually become much larger through a merger—if the industry starts battling for market share when the economy recovers and demand for housing improves. Analyst David Dwyer of Kidder Peabody, a co-underwriter of Ethan's stock offering, agrees: "Ethan represents the best play in the furniture industry from the perspective of both strategic positioning and valuation." He notes that Ethan, now at 18⅞ after hitting 21 in May, is trading at a far more modest price-earnings multiple—11 times estimated 1994 earnings—than Masco, the nation's largest furniture maker, which is selling at 16 times earnings. "Ethan has better growth potential than Masco because of its concentration in furniture," adds Dwyer. Less than 40% of Masco's operating earnings come from its furniture unit. The rest comes from bathroom and home-improvement products.

BUCKING THE TREND. Over the past four years, Ethan has managed to produce high operating-profit margins despite the slump in the furniture industry. Dwyer notes that since 1989, margins were 11% to 14% each year despite declining margins at other furniture companies, where margins have dropped on average to 5.7% from 12.7% during the same period.

Dwyer figures Ethan could generate sales growth of about 10% over the next several years, propelled not only by an industry recovery but by increased market share and new store openings. Chairman, President, and CEO Kathwari says he expects to add 15 stores this year to the company's current 275. While Ethan owns only 15% of its stores, its products are sold exclusively through Ethan Allen dealers that don't sell competing products. Dwyer sees the company earning $1.30 a share this year and $1.65 in 1994, vs. 47¢ last year. He thinks the stock should hit 30 in a year.

ETHAN ALLEN: A ROCKY START

DATA: BRIDGE INFORMATION SYSTEMS INC

SHORTS STILL LOVE U.S. SURGICAL

The stock of U. S. Surgical, which is down to 25 from 105 last July, has produced a bonanza for short-sellers this year. So have the shorts cashed in their chips? Not a chance. They maintain that U. S. Surgical, the pioneer in developing laparoscopic instruments, is still way overvalued. They see the stock skidding to 10.

Some bulls now acknowledge that the shorts may be right. Even the bold optimists who snapped up shares in early May, when the stock was down to 35, have given up. As reported in this column (BW—May 17), Keith Schneider and Clarence Bartow of Garrison Partners were buying then because they believed U. S. Surgical had hit bottom and was on its way back up to the 50s. Wrong.

One money manager who shorted the stock at 100 says there's no way the company can make money this year. "Even if the laparoscopic business improves, reusable instruments—rather than the disposables U. S. Surgical makes—will dominate the market," says the manager. "So we don't know where the earnings will come from."

Indeed, the company posted a loss for the second quarter of 39¢ a share, vs. earnings of 58¢ a year ago. That loss was bigger than the 25¢ deficit the bears had expected. And the quarter's sales of $228.8 million were below a year ago's $304.8 million.

Another worry is competition from Johnson & Johnson. One bear says J&J's Ethicon unit's laparoscopy instruments and surgical products are now being marketed more aggressively at lower prices to some of U. S. Surgical's major customers. U. S. Surgical declined comment.

A BACK OFFICE FOR MUTUAL-FUND FEVER

What's the hottest business around? Mutual funds would be a good bet. And one stock that some pros are snapping up is BHC Financial. The Philadelphia company was formed in 1983 to provide trading and clearing services to about 49 banks, including Citicorp and PNC Financial, which have brokerage units that offer mutual funds to the public.

What's intriguing about BHC is that the original investors are themselves clients of the company. PNC Financial and National Bank of Detroit, for instance, each own 4.3%, and PNC alone accounted for 10% of BHC's 1992 revenues. Citicorp, which isn't an original investor, is BHC's largest customer, accounting for 14% of revenues.

Analyst Fred Meinke of Raymond James Financial Group figures that revenues should grow at a 20% rate this year and next. He notes that mutual-fund and insurance companies have started to seek BHC's services, including T. Rowe Price, the large mutual-fund company. BHC, which went public last April at 14, will likely post earnings of $2 a share this year and $2.25 next year.

Now at 20, "the stock remains an undiscovered bargain considering its low price-earnings multiple and high return on equity," says investment manager Jim Awad. Brokerage stocks sell at p-e's as high as 21. Awad thinks BHC should should sell at 15 times estimated 1994 earnings, or 34. With the rapid expansion of its business, including a discount brokerage, BHC is "natural buyout bait," says Awad, particularly for the banking companies that now own stakes in it. "A stock is usually put in play easily when ownership is concentrated in few hands," he notes.

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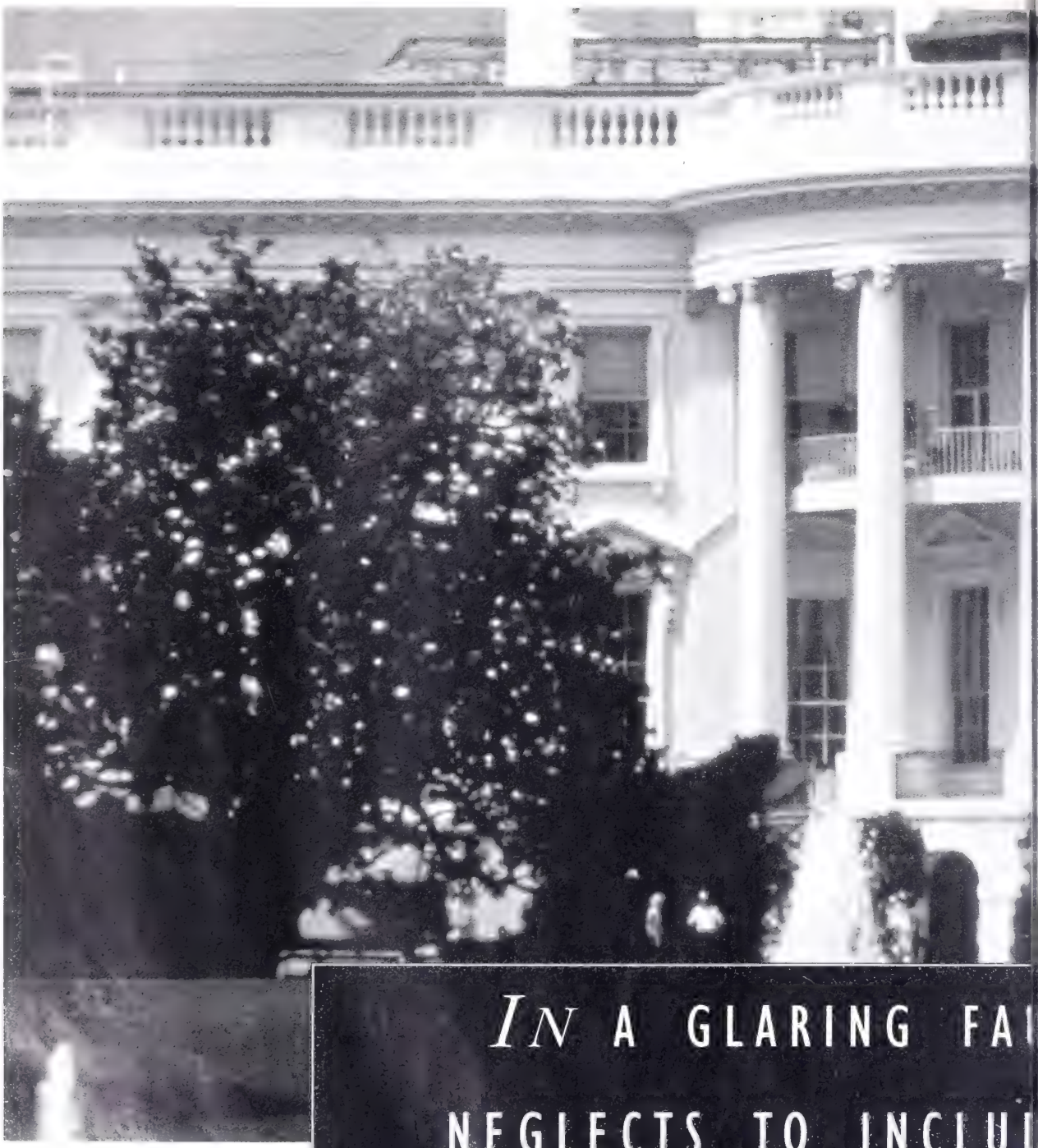

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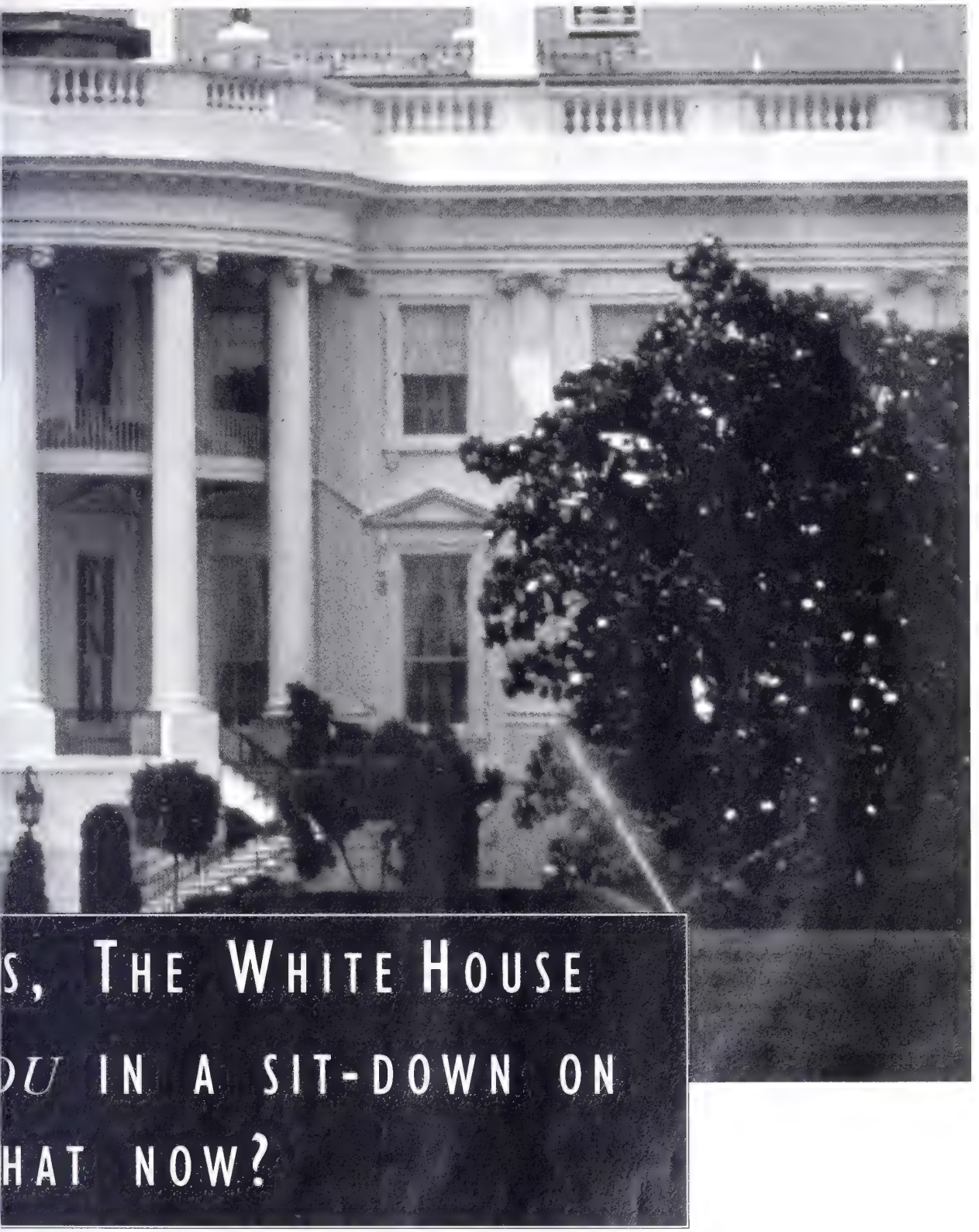

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A TRICKY TACK FOR BORLAND

CEO Kahn says his new course will yield smooth sailing soon

One thing Philippe Kahn knows how to do is sail. Several years back, he and his crew won the Pacific Cup Race from San Francisco to Hawaii in record time. Typical of Kahn, he won by heading off in his own direction, first sailing south to avoid a high-pressure system where the wind would be weak rather than heading west like the other competitors.

Today, Kahn's software crew, Borland International Inc., needs its own mighty maneuver to set it ahead once again. For the past year, the No. 5 maker of personal-computer programs has been veering straight toward the high-pressure system that is Microsoft Corp. Seriously late in bringing to market new products for Microsoft's Windows, Borland has been forced into price wars with the software giant, heavily discounting its new spreadsheet and database programs. "The last thing you want to do is sail right behind the leader," says Goldman, Sachs & Co. analyst Rick G. Sherlund. "The right strategy is to sail away, and maybe get a puff of wind that Microsoft doesn't get."

Kahn believes that even though the course he chose has resulted in some short-term setbacks in earnings and market share, it will soon position Borland to compete better with Microsoft. The key, according to the 41-year-old founder, chairman, and CEO, is a big push this fall into "client-server" software. The move will be aided by Borland's expertise in "object-oriented" programming techniques—a way of assembling software out of reusable modules, or objects. In the short term, the shift to objects has caused costly delays in the critical new Windows products, but by moving early to the new technology, Kahn asserts, he'll wind up ahead of the pack later on.

For now, the immediate pain overshadows the potential gain. Because the first two Windows products created from objects, the Quattro Pro spreadsheet and the Paradox data base, were more than a year late when they shipped last October and January, respectively, Borland lost market share: Paradox dropped from 30% to 22% last year. But favorable reviews for the new Windows version helped Paradox pop up to 25% in June, says market researcher InfoCorp. Quattro Pro, also praised by reviewers, has been stuck at 10% for the past two years, says InfoCorp, though Borland claims that market share has grown in recent months.

Rebuilding market share is only half of Kahn's plan. The other half involves a new division within the $464 million company dedicated to the fast-growing, high-margin business of client-server computing, in which powerful "server" computers coordinate the actions of PC networks. Headed by former Microsoft executive Robert H. Dickerson, the group is developing a slew of new software, including programs to link data kept by individuals on PCs to the corporate data bases stored on servers—minicomputers or souped-up PCs. "We're back in a big way," says Kahn. "You'll see our [new] stuff unfold this fall, and everyone will be surprised."

CATCH-UP. Customers and investors have heard such talk before. And since so many of Borland's products have been so late, many observers aren't holding their breath this time around. Besides the delays with Paradox and Quattro Pro, Borland two years ago promised a new version of the dBase package, which it got in its 1991 buyout of Ashton-Tate Corp. The first hit data base for PCs, dBase still has a loyal worldwide following among programmers. Now, Borland says dBase for Windows will be out by early next year. Meanwhile, Microsoft began shipping a Windows version of FoxPro, a dBase clone, last January.

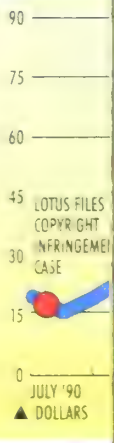
In the meantime, Borland is mounting a slow recovery. After posting losses of $160 million over two fiscal years because of product delays and restructuring charges from the Ashton-Tate buyout, earnings are rebounding slightly. In the three months ended June 30, Borland earned $6.2 million on revenues of $123.4 million, compared with net income of $1.7 million on sales of $114.8 million last year. Those numbers be most analysts' estimates, but Wall Stre is taking nothing on faith. Borland stock is trading around 20, near its 5 week low (chart). "Borland has failed live up to its promises," says Robertsc Stephens & Co. analyst Peter Rodger "They're clearly not in a leadership pos tion anymore."

And despite a favorable reception fo its new packages, Borland's immediat future is still clouded by software pric wars. Data-base programs that sold fo more than $500 two years ago now se for around $100. That price deflation— the only market that Borland has com to dominate—is largely because of Micr soft, which has shipped about 1 millic copies of its $99 Access package sinc November.

An even bigger problem for Borlan though, could be the trend toward sel ing software "suites." These bundles three or four different programs go fo one discounted price, usually aroun $800. Microsoft now gets about 70% its applications-software revenues b selling suites, estimates Sherlund. T respond, Borland linked up with Wor Perfect Corp. in April. Borland now sel WordPerfect's word-processing progra bundled with Borland's data base an spreadsheet. But getting programs fro different suppliers to work as well t gether as packages from a single suppl er is tricky. "I believe it's impossible says Robert K. Weiler, a senior vic president at Lotus Development Corp which also sells suites.

Meanwhile, Lotus is sticking it to Bo land on the legal front. The copyrigh suit it filed against Borland in 1990 ha largely gone Lotus' way. The Cambridg (Mass.) company claimed that a 1-2- compatibility feature in Quattro Pro ir fringed on Lotus copyrights, and a Bo ton judge agreed in July, 1992. Then, few weeks ago, the judge cleared th way for a trial to determine damages

WILL BORLAND BOTTOM OUT OR BOUNCE BACK?



*CLOSING PRICE ON JULY 20 1993
DATA: BRIDGE INFORMATION SYSTEMS INC

ich Lotus believes are in e range of hundreds of llions of dollars. Borland nemently disagrees and l try to appeal the decin before any damages e determined or paid.

OWDED FIELD. Borland's l future, however, will determined not in the rtroom but in the marcplace, where it must rk to become a big playin client-server software. ta-base suppliers such as acle, Sybase, and Inforx have a huge headstart er Borland and have ened record profits for the st year or so. In addin, startups such as Gup- Corp. and Powersoft rp. have carved out nichin data-base software d programming tools t help companies set up all client-server netrks—the same market rland is eyeing. Those mpanies floated two of s year's most successful tial public offerings.

KAHN: DOGGED BY A HISTORY OF UNFULFILLED BOASTS AND LATE PRODUCTS

Dickerson is the one who will have to al with these rivals. "When the smoke ars," he boasts, "the Guptas and the wersofts of the world are gonna be ast." He'll start with what he calls ue" programs that will allow Paradox d dBase to exchange data with Interse, Borland's own server data base, as ll as with those from Oracle and Syse. Then, a whole series of products is nned, including new programming ls and versions of Interbase for Misoft's Windows NT operating system d Novell Inc.'s pervasive NetWare tworking software, according to sourclose to the company. These prodts would let companies link all of their ployees into one central inventory or ounting system without using an exnsive mainframe. Kahn says client-server programs should bring in hundreds of millions of dollars in revenue in a few years vs. $25 million now.

He believes that object-oriented programming will give Borland a special edge. Kahn says he can now quickly add new features by simply adding new modules to any of his packages. Rivals are also adopting object technology, though most are doing it more slowly and quietly. They raise an interesting question: If Borland's object technology is so good, why hasn't there been a bigger payoff? Steven P. Jobs, whose NeXT Computer Inc. has developed an object-oriented operating system for desktop computers, claims it's because Borland's software is not built on such an operating system. "You can't do it on top of Windows," argues Jobs. "Borland just has a thin veneer" of object technology.

Some critics think Borland's problem is much simpler and lower-tech. They think that Kahn, who had cultivated an image of his company as a lean and aggressive bunch of "barbarians," simply became complacent. "When he starts believing all the press that he's successful, that's when the mistakes are made," says Brad Silverberg, a Microsoft vice-president who used to work for Kahn at Borland. Wall Street analysts cite Kahn's decision in 1991 to go ahead with plans to build a new, $100 million headquarters despite mounting pressure on profits, as an example of his complacency. Kahn says it was the only way to consolidate the company's 1,900 employees, now spread among 11 buildings in Scotts Valley, near the California coastal town of Santa Cruz.

The snazzy new headquarters befits a software superpower. But there are many who doubt that Borland will ever achieve that status. Influential analysts such as Rodgers of Robertson Stephens believe Borland missed its chance and is now only valuable as a potential acquisition by a financially strong software company. Kahn denies an assertion by Lotus that he approached that company about a merger and claims he rebuffed entreaties by Computer Associates International Inc. Kahn says he's steadfast about keeping Borland independent. He seems to be counting on one amazing gust of wind.

By Richard Brandt in Scotts Valley

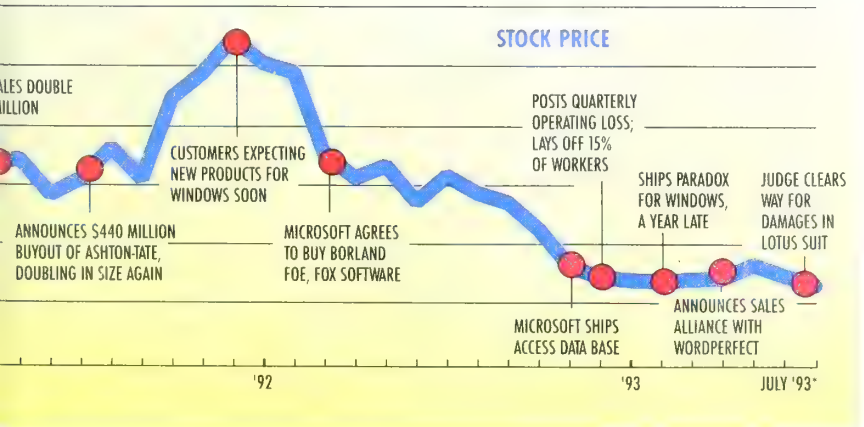


PHOTO: KAHN BY ROBERT HOLMGREN; CHART BY ERIC HOFFMAN-J. BW

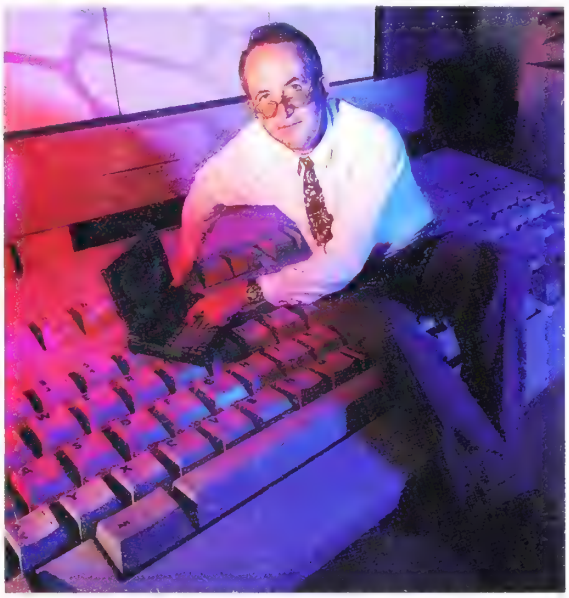
COMPUTERS

IBM, APPLE, COMPAQ... AND VOBIS AND ESCOM?

Two German discounters gain on U.S. PC makers in Europe

Ever since Apple Computer founders Steven P. Jobs and Steve Wozniak started working in a garage in 1976, the computer jock who makes a fortune bringing personal computers to the masses has been a quintessentially American hero. But in Germany, two bold upstarts—Theo Lieven of Vobis Microcomputer and Manfred Schmitt of Escom Computer—are beating Americans at their own game of selling PCs on the cheap.

Never heard of Lieven and Schmitt? Well, the executives in Europe for such giants as IBM, Apple, and Compaq have. Lieven's Vobis has rocketed out of nowhere in the past three years to grab more than 19% of the German PC market (chart), the world's third-largest: U. S. and Japan are bigger. The company sold more than 390,000 of its Highscreen PC clones last year by crunching prices in Germany 40% to 70%, bringing them roughly in line with U. S. discount-outlet prices. Even more impressive: With $890 million in sales last year, Vobis ranks fifth in Europe, challenging the likes of IBM and Compaq Computer Corp. Vobis, backed by $31 billion German-Swiss retailer Metro, is now Europe's largest computer retailing chain, with more than 200 shops from Paris to Warsaw.



LIEVEN OFFERS LOW-END PCs MADE WITH ASIAN PARTS

RIVAL ALLIES. Vobis quickly inspired a local imitator, Escom Computer. Since copying Vobis' strategy in 1991, Schmitt's Escom hit $650 million in sales last year and now holds 6.9% of the German market. Like Lieven of Vobis, Schmitt is expanding, opening new stores with the goal of boosting his 173-outlet chain to 200 by yearend.

But Vobis and Escom want to move to a larger stage. So they're forging powerful marketing alliances with their U. S. competitors. On July 9, Vobis announced it would sell Compaq ProLinea, Deskpro/i, and Contura PCs, along with service contracts provided by Compaq. Escom cut a similar deal in March with Apple to sell Macintosh Performa PCs and PowerBook notebooks. These links could boost store traffic, especially among Europeans shopping for their first PCs.

The recipe for Vobis' and Escom's success isn't unknown: Like cut-rate clonemakers in the U. S., they do little engineering and construct PCs from Asian subassemblies. Along with high-volume purchasing power, just-in-time production for their own stores pares costs to the bone. Vobis and Escom clones are priced 15% to 30% below IBM or Compaq machines, even though both U. S. gian slashed prices by 40% to 60% last yea Vobis' 19% gross margins are the tigh est in the industry. "I'll have to mat that," admits William E. McCracke head of IBM's PC business in Europe.

Living so close to the edge is risky, course. Vobis hopes to double busine outside of Germany, to about 50% sales, but Lieven says, "the new stor don't have the same productivity." Sal during the first two months f his new Paris store just off t Avenue des Champs-Elysées ha been "difficult," he says.

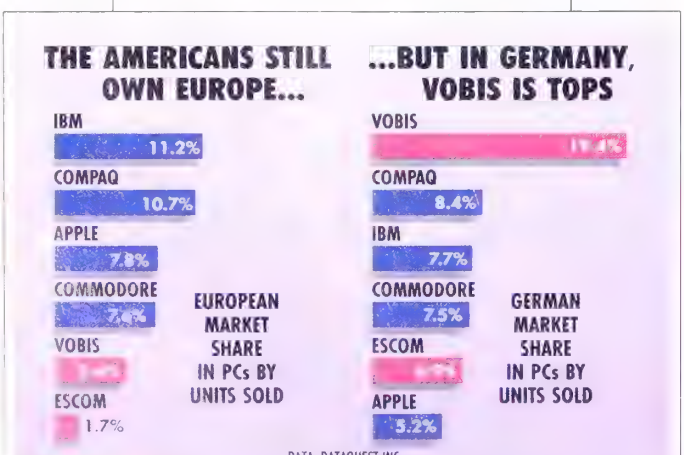
"NO FAT." According to Schmit Escom is doing better in Britai where sales have matched Germa levels. But if the European market—which grew about 20 over the past six months—stall both companies could be squeeze badly. "We have no fat. If cos rise 40%, we need 40% growth turnover," concedes Lieven.

Both clonemakers figure the store networks will help kee them in touch with customers. Li ven, for example, developed a s phisticated inventory-control sy tem to analyze daily data ar show what is selling and the pro it per sale. "Their extensive reta network is their competitive edge says Natalie Spitz, a PC analyst Dataquest Inc. in London.

To one-up Vobis, Escom is bolsterin existing stores with additional service such as on-site repair, and expandin into electronics superstores, one of whic opened recently in the German city Bochum. With 11 more such outlets b 1994, Schmitt hopes to position Esco as a distributor of forthcoming mult media products, which bridge the worl of computers and consumer electronic In the meantime, he's preparing Esco to live with net margins as low as 1 instead of the already lean 3% to 5%.

To stay on top, analysts say, Vob must reinvent itself as wel The new alliance with Com paq is a start. Lieven is als concentrating on a broade product line with "more pro ucts in the $100-to-$1,00 range." Lieven plans to brain storm new gadgets such a "personal digital assistants and have other companie produce them if he can't do for a price that is lo enough. If he succeeds, U. S electronics makers could lear to fear the words "made i Germany."

By Gail E. Schares i Aachen, Germany



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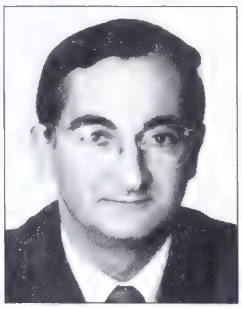

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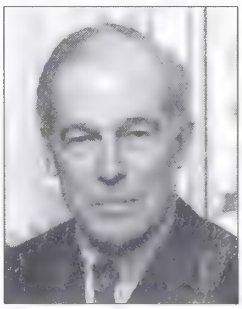

Henry Wendt,
Chairman,
SmithKline Beecham plc

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EDITED BY AMY DUNKIN

Investing

AN ANNUITY FOR FOLKS OF ALL AGES

If there ever was a financial product whose time has come, it's the variable annuity. The product, which combines the investment potential of mutual funds and the tax-deferral attributes of insurance, would appear to be a winner, especially for baby boomers, many of whom are facing two sobering realities—middle age and higher income taxes.

Now, you may think annuities are for old folks. But if you want to have a lifetime stream of income in your golden years, you need to start saving early. The annuity helps build that nest egg. Unlike mutual funds or bank accounts, the dividends, interest, and capital gains realized within the confines of an annuity are not taxed during the accumulation period.

"MAXING OUT." What makes the annuity "variable" is that the return varies depending on what kind of investment program you select. Under the traditional or "fixed" annuity, the insurance company determines the rate of return. Over time, however, well-managed variable annuities are likely to beat fixed accounts by a handy margin.

But the variable annuity is not for your first dollar of retirement savings. If you qualify for a defined-contribution plan such as a 401(k) or an individual retirement account, it's in your interest to "max out"—or contribute the maximum amount of pretax dollars you're entitled to under the tax code. Then, you may also want to consider putting money into a nondeductible IRA or making aftertax contributions to your 401(k) plan. Both vehicles have lower expenses than do variable annuities.

But they have their drawbacks: They require that you start withdrawing money by age 70½; annuities will usually allow you to delay withdrawals until age 85. The 401(k) offered by your employer may not have the variety of investment options available in an annuity. And both the aftertax IRA and 401(k) have maximum contributions. With the variable annuity, there's no limit to what you can salt away, as a lump sum or through periodic investments.

> WELL-MANAGED VARIABLE ANNUITIES SHOULD BEAT FIXED ACCOUNTS HANDILY

As with all retirement plans, be sure you can afford to leave the money invested in an annuity until age 59½. Early withdrawals can be expensive. First, the IRS exacts taxes and a 10% penalty on the accumulated earnings. There may also be a "surrender charge."

The variable annuity is a tax-saver because all the taxes on interest, dividends, or capital gains are deferred until the investor starts to draw on the account. That won't happen for years, at the time the annuity owner is retired and presumably in a much lower tax bracket. Consider that the marginal federal rate for couples with taxable income of $140,000 is likely to climb to 36%, and those making more than $250,000 will be hit with a surcharge that raises the rate to 39.6%. And that doesn't count state and local taxes. If you're likely to drop into the 31% or 28% bracket as a retiree, the savings can be substantial.

COMPLEX INSTRUMENT. But if the idea behind the variable annuity is simple—tax-deferred investing for retirement—the variable annuity is a complex instrument as well. That's why most annuities are sold by brokers, financial planners, or insurance agents. But not everyone who sells annuities carries every variation. The danger in relying on one person or investment firm is that the best variable-annuity contract for you may not be available.

Variable annuities have their critics. Arnold M. Rosenbaum, a New York financial consultant, notes that annuities, like taxable mutual funds, often generate capital gains. But when the money is withdrawn from an annuity, it's always taxed at ordinary income tax rates, not the 28% capital-gains rate.

Most investors can still beat the aftertax return on mutual funds using the variable annuity. To make an informed decision, investors need to understand both the investment and insurance features of the annuities, or what's sometimes called the "wrapper."

If you're already a mutual-fund investor, the investment part is easy. The selections under the annuity be-

have an awful lot like mutual funds; in fact, ny are clones of well-own funds, run by the ne manager. The average riable annuity offers about ven choices, including stock, nd, money-market, and spe-lized funds. Each is called a baccount."

To keep track of a subac-nt's performance, annuity ners follow the "accumula-n unit value" (AUV). Similar the net asset value of the tual fund, the AUV is calcu-ed by measuring the ange in the value of the in-stment, adding the portfo-s income and realized capi-gains, and subtracting nagement and insurance penses.

AVY TOLL. The main insu-nce cost is the "mortality d expense" charge, which ys for the "guaranteed ath benefit." That feature sures that if you die dur-the annuity's accumulation ars, the value of the annu-to your beneficiary will be least as much as you put o it. Some annuities offer a ep-up," which extends the arantee beyond your con-butions to part of the ac-mulated earnings. The &E" charge, as it's also own, can run anywhere m 0.55% to 1.40%. En-ncements such as increas-guarantees usually mean her M&E charges. Atop the E, the insurance company ies a contract charge, usu-y a flat fee in the $25-to-$40 ge, that covers the cost of ministering the annuity. On $25,000 annuity, a $25 con-tract fee is a scant 0.1%.

All told, investment- and insurance-related expenses can exact a heavy toll. Average expenses for variable annuities run about 2.12%, according to *The VARDS Report*, a publication that tracks variable annuities. That's nearly one percentage point more than on mutual funds. But then again, taking 1% less per year in return may be a fair trade-off for tax deferral.

Annuity investors can face sales charges as well. But there are ways to dodge them. First, don't buy any annuity that levies an up-front "load." Most annuities have surrender charges as high as 9% that decline by one percentage point a year and disappear after five to ten years. Don't surrender, and you don't pay. Look for annuities that have no exit fees such as the Galaxy Variable Annuity sold by Fleet Financial Group or variable annuities offered by two mutual-fund companies—Scudder, Stevens & Clark and Vanguard Group.

Expenses are important, but your selection should be determined by the investment features—not fractions of a point in annual costs. "What's so great about paying less in fees if you're getting less in investment return?" asks Tom Whalen, research editor for *Morningstar Variable Annuity/Life Performance Report*.

Likewise, investors should choose annuities for their investment-opportunities program and not for the payout options, which may not come into play for decades. When it's time to annuitize your variable annuity—exchange it for a lifetime income—you don't have to do it with the insurance company you've had for years. The IRS lets you transfer tax-free between insurers at any time. You also have the option of withdrawing your money in a lump sum or periodic installments without ever annuitizing.

It's also advisable to choose an annuity backed by a well-capitalized, highly rated insurance company. But if the company fails, your funds won't be lost or frozen. Unlike fixed annuities, variable-annuity subaccounts are legally separate from the insurer's general accounts.

Getting a fix on variable annuities isn't easy—there are more than 160 annuity contracts with nearly 1,000 subaccounts. And unlike stocks and mutual funds, you can't turn to the daily newspaper or stock quote terminal for investment returns.

WORTHY EFFORT. If you're pleased with your mutual funds, ask the fund company about a variable annuity with similar offerings. Many fund managers have their own program or can lead you to annuity contracts for which they manage subaccounts. Another route is to seek an annuity such as those offered by Nationwide Life Insurance and Life Insurance Co. of Virginia with subaccounts run by Fidelity, Oppenheimer, and other well-known mutual-fund managers.

You may want some independent information as well. A subscription to Morningstar's report on variable annuities is probably overkill, but a single copy is only $15. Call 800 876-5005. *The VARDS Report* sells a single issue for $49 but will send a free sample if you write to Box 1927, Roswell, Ga., 30077-1927, or call 404 998-5186.

Reading up on variable annuities takes effort. But when you're choosing an investment you may have for the rest of your life, it's an effort worth making. *Jeff Laderman*

A VARIABLE-ANNUITY GLOSSARY

An annuity is a contract between an investor, or the annuitant, and an insurance company. The variable annuity differs from the standard or "fixed" annuity because its value fluctuates with market conditions. It has the potential to earn much higher returns than fixed annuities. Investors salt away money for years. No taxes are paid on profits until the funds are withdrawn. Interested in investing? Here are some terms you'll need to know.

ACCUMULATION UNIT VALUE The equivalent of price per share, or the net asset value of a mutual fund. It's calculated by measuring the change in the value of the investment, adding the portfolio's dividend income and capital gains, and subtracting the management and insurance expenses.

CONTRACT CHARGE An annual charge, usually in the $25-to-$40 range, paid to the insurance company for administering the annuity contract.

GUARANTEED DEATH BENEFIT Insures that, in the event of the annuity investor's death, it will be worth at least as much as the investor contributed. This feature protects against downward market fluctuations. Some annuities "step up" this benefit periodically to include the earnings.

MORTALITY & EXPENSE CHARGE The percentage of the annuity's assets the insurance company deducts to insure the guaranteed death benefit.

SUBACCOUNT The investment portion of a variable annuity, analogous to a mutual fund.

SURRENDER CHARGE A fee, usually a percentage of assets withdrawn, levied for withdrawing funds in the first five to ten years of an annuity contract.

DATA: *THE VARDS REPORT*, MORNINGSTAR INC., BUSINESS WEEK

Autos

A SPORTY CAR AND A SENSIBLE FAMILY VALUE

In the past two years, every Japanese carmaker has come up with a distinct strategy for its move into the biggest and most lucrative part of the car business, the market for $15,000-to-$20,000 practical, down-to-earth family sedans. Toyota shot for the high end with its Camry, using luxury touches liberally borrowed from its elegant Lexus. Nissan fielded the smaller but spirited Altima, with a sticker price clearly geared for tough economic times.

The latest entry is Mitsubishi's 1994 Galant, and it's aimed squarely between the two. Its exterior dimensions and interior roominess are close to those of the midsize Camry or Mazda 626, yet its price is more like that of the compact Altima. A compromise, perhaps, but an eminently sensible one.

The completely revamped Galant has grown nearly three inches in length and is wider and higher as well. It has shed its boxiness for fluid curves and an aggressive sloped hood reminiscent of the Diamante, its upscale stablemate. Prices start at $13,600 for the bare-bones S version and top out at $20,000 for the sporty GS model, whose sprightly 160-horsepower engine requires a bump on the driver's side of the hood that will undoubtedly become the Galant's distinguishing mark.

The middle-of-the-line $16,775 ES model probably will be the biggest seller, though, and here Mitsubishi hasn't stinted at all. Controls and displays are simple and straightforward. Mirrors and windows are powered, and—a nice touch—they work even after you turn off the ignition. Air-conditioning is standard.

The $20,000 Mitsubishi Galant GS: Dual air bags but no leather seats

FUZZY LOGIC. The company's engineers have come up with an innovative automatic transmission controlled by a computer technology called fuzzy logic, which closely imitates how a human would drive the car. Going downhill, for example, it w downshift you're brakin yet still gainin speed, just you would do you were usin a stick shi And on twis uphill grade the transmi sion will lo into the op mum gear i stead of continually shiftin up and down according to t more usual, annoying formul

The Galant has few prete sions to luxury. You can he the powerful four-cylinder e gine, and the steering a suspension let you feel t road. Oddly, even the top-c the-line model lacks the o tion of power seats or a leat er interior. But dual air ba come standard on every mo el, and antilock brakes a available on all but the ba car, for $924 extra. That's it should be for a car aime at families, where luxury i evitably takes a back seat safety. *Larry Armstro*

Smart Money

INDEX FUNDS THAT GO ONE STEP BEYOND

If you favor investing in growth or value stocks, a new type of mutual fund can accommodate your style. Known as "style" portfolios, they are akin to index funds, which invest in hundreds of stocks at a time, attempting to mimic the performance of their index. But style portfolios carve out a growth or value slice of an index.

Vanguard Index Trust divides the Standard & Poor's 500-stock index into two parts: a growth fund, comprising the 195 stocks with the highest prices relative to their book value, and a value portfolio, made up of the remaining 305 stocks, which represent the best buys. Dreyfus has broken down the Wilshire Top 2500-stock index into the Dreyfus-Wilshire Target Funds, including large-company growth, large-company value, small-company growth, and small-company value portfolios. The fund adviser screens out "wishy-washy" stocks that don't clearly fit the style, says David Borger, director of research for Wilshire Asset Management.

OLDER IS WISER. Style funds are a passive alternative to seeking out the best growth or value managers. The funds have a more rigid style orientation than actively managed mutual funds. Most fund managers keep part of their portfolio in cash, as well as in stocks that don't strictly match the fund's style profile. This year, value investing has provided handsome gains, and value-index funds have trounced their diluted actively managed peers. But managed-growth funds have outperformed growth style funds because the latter were more exposed to stocks that did poorly.

Returns for regular stock market index funds were about 4.7% for the first half of 1993, falling midway between value and growth style funds. Launched late last year, style funds have low turnover, so you pay less capital-gains tax Vanguard charges 0.2% year in expenses; Dreyfus i waiving all fees.

The market moves be tween favoring growth o value, high-cap or low-ca stocks. Knowing this, "ther are a lot of very interestin investment programs you ca set up using these as tools, says Don Phillips, publishe of *Morningstar Mutual Funds* You could put money in eac style offering or select on fund to fill a hole in a portfo lio. But advisers war against buying the fund i favor and selling it when th market changes course.

Some advisers are wary o index funds. "If you want t do better, buy good qualit managers," says Robert Glov sky, a Boston financial plan ner. He recommends fund that are at least three year old. Still, for people wh want to avoid the whims o active management, the ne funds offer a low-cost way t invest with style. *Amey Sto*

INVESTING WITH STYLE

Fund	1993 total return*	Managed funds average
VANGUARD INDEX TRUST		
Large company value	12.17%	6.83%
Large company growth	-2.63	-0.17
DREYFUS-WILSHIRE TARGET PORTFOLIO		
Small company value	6.97	5.57
Small company growth	3.24	5.21

*THROUGH 6/30 DATA: MORNINGSTAR INC

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Leisure

BIG IRONS ARE FINDING THE DUFFER'S SWEET SPOT

Since 1991, golfers far and wide have been enjoying a steamy love affair with Big Bertha, the fat-headed driver introduced by Callaway Golf. With a bigger sweet spot and improved weight characteristics, Bertha and countless bulbous imitators belt the ball farther and straighter than a regular-size wood. "It's an unbelievable phenomenon," says T. Edwin Watts, president of Edwin Watts Golf Shops. "Our customers love 'em, and they buy the heck out of 'em."

So, it was only a matter of time before golf-club manufacturers began pumping up their irons. Cobra Golf is teeing off this season with a new line of King Cobra oversize irons. The Ping Zing, Head Golf's Big Head, and Wilson Sporting Goods' 1200 Gear Effect are among those also sporting bigger blades. The field will expand dramatically in August at the big golf equipment show in Anaheim, Calif. Wilson, for instance, will attach oversize heads to all its clubs below the premium-priced Staff line. And Founders Club Golf—whose Judge irons won this year's U. S. Open in the hands of pro Lee Janzen—will launch both midsize and oversize sets.

DEEP DIVOTS. The idea behind the new clubs is that expanding the face allows the clubmaker to move weight away from the center, thereby enlarging the sweet spot in the middle. Cavity-backed clubs—pioneered by Karsten Manufacturing's Ping irons—had already moved weight to the perimeter of the club face. Oversize clubs shove the perimeter out even farther. Surrounding the ball with more weight on all sides reduces twist on impact. And that means balls that are hit off-center fly truer and longer.

OVERSIZE CLUBS, SUCH AS THESE COBRA IRONS, GIVE SOME GOLFERS ADDED CONFIDENCE

The problem is, bigger blades tend to dig a deeper divot, and some say they create undue wind resistance. Moreover, accomplished golfers who like to "feel" the ball with their irons say the expanded heads deaden that sensation. Many traditionalists have a more prosaic complaint: They say the clubs look funny.

By next year, though, oversize irons will be selling across the price spectrum. Wilson's lowest-end model will weigh in at $200 per set. Clubs with graphite shafts from Founders and Cobra will be priced closer to $1,000. Are they worth it? So far, many feel there's more hype than substance. John Hoeflich, Titleist's director of golf-club research, has tested all the new clubs—including Titleist's prototype—for pure performance. He says there's no difference. Nevertheless, Titleist plans to introduce a midsize head on its DTR iron this fall, so it doesn't miss out on a mar stampede. "Just making bigger doesn't make it b ter," Hoeflich says. "But fr a marketing point of view, a good idea."

He's probably right. M duffers are willing to try a thing that promises to lo their score. Cheryl Anders assistant club pro at Roll Hills Country Club in Wilt Conn., says King Cobra ir with graphite shafts ha been flying out of her sh Anderson doesn't use th herself. But high-handic golfers "feel more comforta looking down at that head—like they're not go miss," she says.

SLEEKER HEAD. New Orle insurance agent Michael burn loves them. A 16 han capper who has been playi for eighteen months, Cob switched to Cobras from P Eye 2's because he seemed hit farther with the big clu "All I know is, I don't feel I have to swing as hard," burn says. "And if I belie it, that's all that counts."

Clearly, market dynam favor a move to anythi new. For the past seve years, according to Allan B er, senior vice-president Audits & Surveys, t overall golf-equipme market has been decl ing. Oversize drivers, by Big Bertha, have be the one bright spot. C laway Golf, a $23 milli company in 1990, is on p to post $200 million in sa this year. Its stock price nearly quadrupled since went public in early 1992.

But don't expect to find Big Bertha iron at the A gust show. Founder Ely C laway says his researche haven't devised a club h happy with—yet. "Our reta ers say 'Hurry up.' I hear 1,000 times a day," Callaw says. "Well, we hurry, but hurry slow." Industry wat ers think Callaway is sho ing for an oversize iron wit sleeker head than on existi models. "I don't think t right club has been develop yet," says one major golf tailer. It's just a matter time. *Michael On*

Worth Noting

■ **BROKER BEWARE.** Thinking about suing your stockbroker? A free pamphlet, *Legal Representation in Securities Disputes*, provides answers to rudimentary questions, from how to resolve securities squabbles (typically, arbitration) to whether it makes sense to hire a lawyer (depends on claim size). Call the New York City Bar Assn. at 212 382-6695 for a copy.

■ **GIFT OF GREEN.** Have trees planted in a friend's name, and help restore the ecosystem. Through American Forest's Global ReLeaf program (800 8-RELEAF), you pay $10 for 10 trees and receive a gift card to send your friend. The organization planted its millionth tree last spring.

ndex to Companies

index gives the starting page for a story or fea- with a significant reference to a company. Most idiaries are indexed under their own names. npanies listed only in tables are not included.

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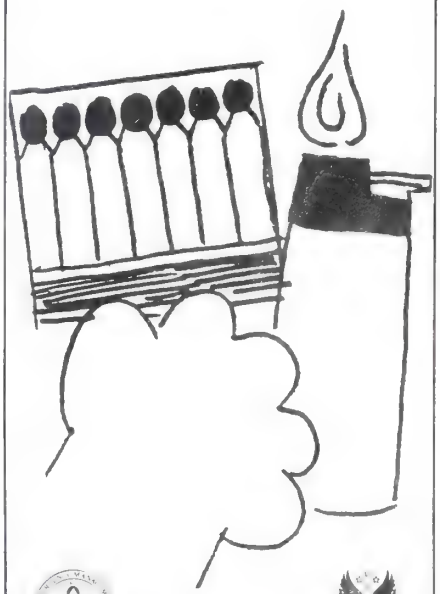
CURIOUS KIDS SET FIRES

When a kid strikes a match, fire strikes back! Children don't realize that a simple flame can blaze out of control in mere minutes. That may be why nearly twenty-five percent of the fires that kill young children are started by children themselves playing with fire.

Don't let fire strike your family. Always keep matches and lighters far out of the reach of children.



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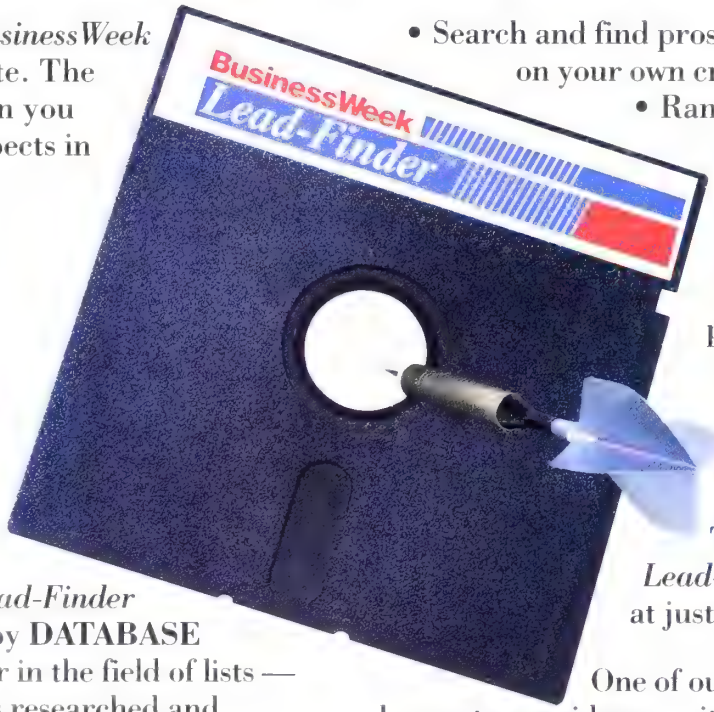

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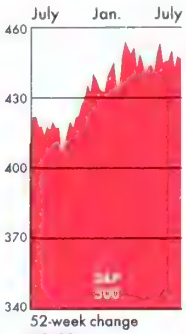
nvestment Figures of the Week

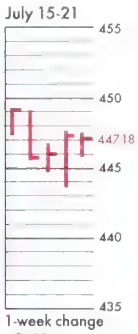
MMENTARY

world's financial markets ed in a generally lackluster k. Global bourses meandered essly, and most U.S. stock in- s showed slight declines. But e were a few bright spots. The Jones industrial average ed on July 21 at 3555, an all- high. And the put-call ratio of ulative sentiment, an often re- e gauge of short-term senti- t, became strongly bullish. The d market turned lower, howev- s traders reacted to downbeat ments by Fed Chairman Alan enspan.

STOCKS

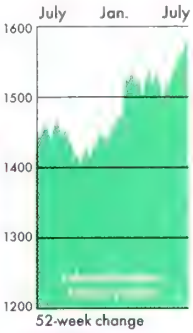


52-week change
+8.8%



1-week change
−0.6%

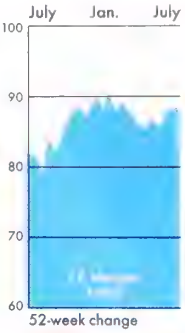
BONDS



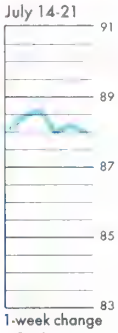
52-week change
+10.5%

1-week change
−0.7%

THE DOLLAR



52-week change
+7.7%



1-week change
−0.1%

ARKET ANALYSIS

STOCKS	Latest	% change Week	% change 52-week
JONES INDUSTRIALS	3555.4	0.4	8.5
SIZE COMPANIES (S&P MidCap Index)	164.9	−1.7	16.3
LL COMPANIES (Russell 2000)	234.9	−1.2	24.3
COMPANIES (Russell 3000)	257.4	−0.8	11.4

EIGN STOCKS	Latest	% change (local currency) Week	% change (local currency) 52-week
DON (FINANCIAL TIMES 100)	2814.1	−0.6	17.8
YO (NIKKEI INDEX)	20,080.9	−0.3	29.2
ONTO (TSE COMPOSITE)	3867.4	−1.9	13.3

FUNDAMENTALS	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.14%	3.06%	3.23%
30-YEAR TREASURY BOND YIELD	6.63%	6.56%	7.63%
S&P 500 DIVIDEND YIELD	2.80%	2.84%	3.04%
S&P 500 PRICE/EARNINGS RATIO	21.2	21.3	23.4

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 26-week moving average	445.6	445.1	Positive
Stocks above 26-week moving average	56.8%	58.8%	Negative
Speculative sentiment: Put/call ratio	0.53	0.42	Positive
Insider sentiment: Vickers sell/buy ratio	2.30	2.32	Neutral

IDUSTRY GROUPS

BRIDGE INFORMATION SYSTEMS INC.

IR-WEEK LEADERS	% change 4-week	% change 52-week	Strongest stock in group	% change 4-week	% change 52-week	Price
OSPITAL MANAGEMENT	17.6	5.9	NATIONAL MEDICAL ENTERPRISES	20.0	−26.2	11 1/4
RANSPORTATION SERVICES	13.1	27.1	FEDERAL EXPRESS	19.1	25.7	53 7/8
RUCKING	12.5	2.3	ROADWAY SERVICES	15.1	6.6	61
ERSONAL LOANS	11.0	34.2	HOUSEHOLD INTERNATIONAL	11.5	44.0	75 1/4
OTELS AND MOTELS	8.5	78.4	PROMUS	23.6	283.9	53 3/4

IR-WEEK LAGGARDS	% change 4-week	% change 52-week	Weakest stock in group	% change 4-week	% change 52-week	Price
OMMUNICATIONS EQUIPMENT	−21.5	−6.1	NORTHERN TELECOM	−33.3	−37.0	24 1/2
PPAREL MANUFACTURING	−15.8	−20.1	LIZ CLAIBORNE	−29.6	−39.1	22
OMPUTER SYSTEMS	−12.1	−42.6	APPLE COMPUTER	−32.2	−40.3	26 7/8
NTERTAINMENT	−11.2	4.3	WALT DISNEY	−14.1	2.1	36 5/8
OLLUTION CONTROL	−10.9	−7.2	WMX TECHNOLOGIES	−14.1	−12.2	30 1/2

UTUAL FUNDS

MORNINGSTAR INC

DERS -week total return	%
EXINGTON STRATEGIC INVESTMENTS	22.3
XCEL MIDAS GOLD SHARES	19.6
HERMAN, DEAN	16.7

veek total return	%
EXINGTON STRATEGIC INVESTMENTS	90.9
BHG GROWTH	77.4
XCEL MIDAS GOLD SHARES	62.8

LAGGARDS Four-week total return	%
EQUITY STRATEGIES	−11.9
FIDELITY SELECT ENERGY	−5.4
PUTNAM ENERGY-RESOURCES	−4.8

52-week total return	%
DFA CONTINENTAL SMALL COMPANY	−16.2
FIDELITY SELECT HEALTH CARE	−15.7
INVESCO STRATEGIC HEALTH SCIENCES	−14.8

ELATIVE PORTFOLIOS

DRI/McGRAW-HILL

lar amounts resent the present ue of $10,000 ested one year ago ach portfolio

centages indicate -day total returns

Foreign stocks
$13,268
+0.13%

Treasury bonds
$12,276
+0.87%

U.S. stocks
$11,041
−0.17%

Gold
$10,959
−0.09%

Money market fund
$10,232
+0.05%

ata on this page are as of market close Wednesday, July 21, 1993, unless otherwise indicated. July 20. Mutual fund returns are as of July 16. Relative portfolios are valued as of July 20. A more stry groups include S&P 500 companies only; performance and share prices are as of market close detailed explanation of this page is available on request.

THE PAYOFF FROM THE NEW ECONOMIC ORDER

A specter is haunting the industrialized world—the specter of sluggish growth. Communism has been vanquished in much of the globe, the victim of its own failure to deliver a decent living to citizens under its rule. Yet capitalism in the industrialized nations is limping along. Unemployment is rising in Europe and Japan and remains high in the U. S. Policymakers are paralyzed by budget deficits and distracted by unwarranted inflation concerns. Business executives are stumped by economic conditions and plagued by a lack of strategic vision. Consumers are holding back, worried about their jobs and the future. Across the industrialized world, people are coping in tough times—but not thriving.

The end of the cold war was supposed to be a boon to all, bringing a release of resources and energy that would catapult growth to new heights, sowing prosperity for millions. That process has already begun, although it may be difficult to detect in the U. S., Europe, or even Japan. Billions of people are joining the world economy, not as beggars but as producers. Cheap labor is drawing investment and production away from the industrial countries. Plentiful goods and materials are crowding world markets, and annual exports from developing nations to industrialized nations have risen by $100 billion since 1989. A new economic order is being born.

Eventually, the entire world should share the bounty of this new order. As nations develop, their need for imported goods rises, and worldwide demand grows. Multinationals expect the developing countries to become vast new markets by the end of the decade, as productivity and incomes climb worldwide. History is on the side of the optimists.

Right now, though, new opportunities are just a tantalizing vision. The rich countries are struggling, even as poorer countries blossom. So what are industrialized nations to do? The voices of reaction say: Forget the new economic order. Close the borders. Keep out Mexican workers, Taiwanese computers, and Russian aluminum. Keep our jobs, our money, and our technology for ourselves.

But you can't put the genie back in the bottle—and in truth, you wouldn't want to. Instead, the U. S. and other industrial powers must follow a two-pronged strategy: They must compete ever more vigorously against new rivals. And they must nurture the new economic order through aggressive, pro-growth policies.

Few people have to be convinced of the need to become more competitive. Companies in the U. S. have shed millions of workers since 1989, boosting productivity and cutting costs. Now, European companies are following suit, and even the Japanese are making big adjustments.

But that's not enough. Cost-cutting is a powerful survival tool, but it hardly a growth strategy. New products, new ideas, and new technologies are what drive sales, and companies in the U. S. and Europe have to adopt offensive rather than defensive strategies. They must become pioneers, producing sophisticated products and services. The nations and companies that invest heavily in research and development will be the ones that succeed in the new economic order.

Governments must also be bold. For too long, the worl central bankers have been fighting old wars, battling an i flation demon that exists only in their memories. While slo growth saps the strength of industrial countries, centr bankers continue to hold interest rates too high. The indu trialized countries are operating at 5% below capacity, whi means that output is a staggering $800 billion less than might be. Add in the vast surge of industrial capacity fro the Third World, and it's clear that the central banks c lower interest rates and stimulate the world economy wit out rekindling inflation.

Leaders of industrial nations must also redouble their e forts to rein in budget deficits, now at an average of 4 of gross domestic product. Deficit-cutting measures help lower inflationary expectations in the financial markets, a so push interest rates lower. Social spending and defense ou lays remain the prime targets for cuts. And when gover ments do spend, the money should go toward education, s ence, technology, and training for displaced workers—t items that help countries compete.

These are the near-term prescriptions. But as de facto gua dians of the world economic system, the industrial countri must take a longer view. Instead of heeding calls for prote tionism, for instance, their leaders should encourage ne ties with developing nations. Over the next few years, th should usher countries such as China and Russia into, sa the General Agreement on Tariffs & Trade, in exchange f having those nations open their markets to all foreign good For the U. S., passing the North American Free Trade Agre ment should be a top priority.

But increased trade alone won't solve one of the bigge problems of the new economic order: the enormous gap incomes between industrial and developing countries. Rig now, average incomes in rich countries are six times tho in poor countries. That's a recipe for big trade imbalance such as the $20 billion surplus that China runs with the U. It also encourages people to migrate in search of greater ric es elsewhere.

So, strange as it may sound, it's in the interest of wealt countries to encourage the enrichment of poor nations—n only through trade, but also by leaning on them to raise t standard of living for their citizens. In Mexico, for instanc the government has been holding down wages to keep i low-cost competitive advantage. That has postponed the i come gains that should follow strong productivity growth.

The new economic order is still young and vulnerable. I course can be easily derailed by a wave of protectionism a military conflict that escalates. But trade is not only goo for growth. It also forces nations to maintain ties out of se interest. And in the long run, that self-interest serves th greater good. Today, not everyone is enjoying the benefi of the new economic order. Given time, however, those be efits will be widely shared. It's up to policymakers and ma agers to take steps to ensure that the promise of the ne economic order is not lost.

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BusinessWeek

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OVITZ

MICHAEL OVITZ ALREADY RULES HOLLYWOOD. NOW THE SUPERAGENT IS TAKING HIS ACT TO MADISON AVENUE, SILICON VALLEY, AND WALL STREET. WILL IT PLAY?

AGE 50

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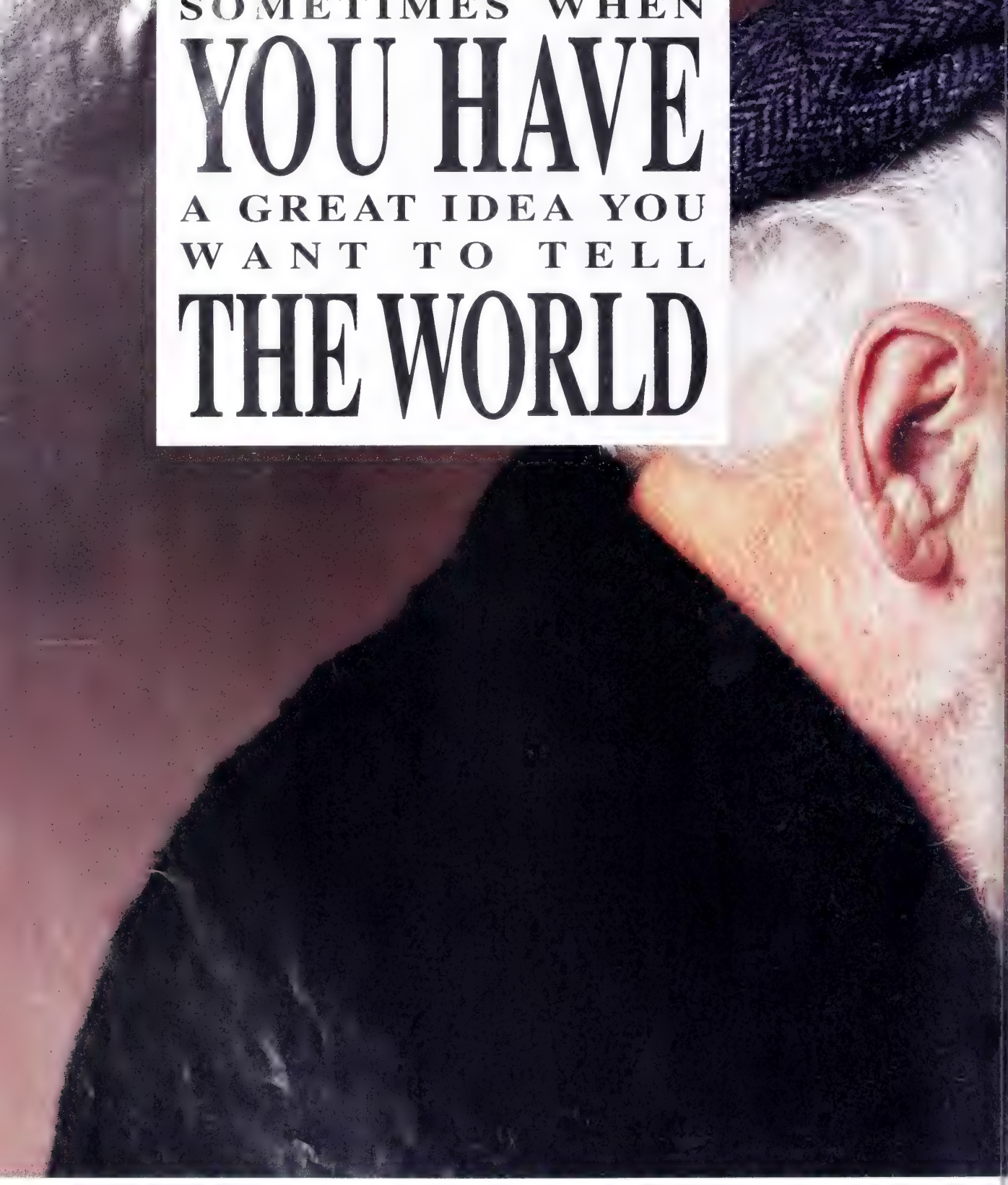

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AND A FAMILY LIFE, TOO: SUPERAGENT OVITZ AND HIS WIFE, JUDY, AT THEIR HOME IN BRENTWOOD, CALIF.

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He is the most powerful man in Hollywood, superagent to the stars, and the dealmaker behind scores of hit films and TV shows. But Tinseltown can't contain Michael Ovitz. Now, he and his Creative Artists Agency staff are branching out into high technology, investment banking, sports, and advertising. Can they do it all well?

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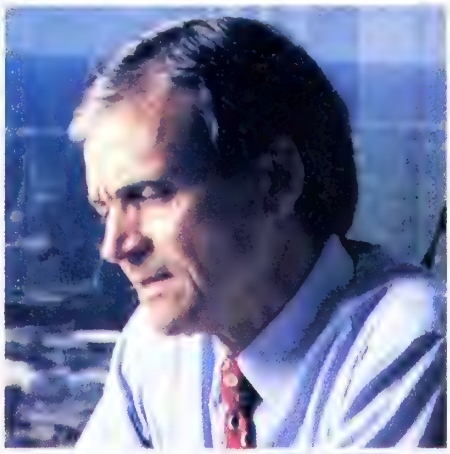

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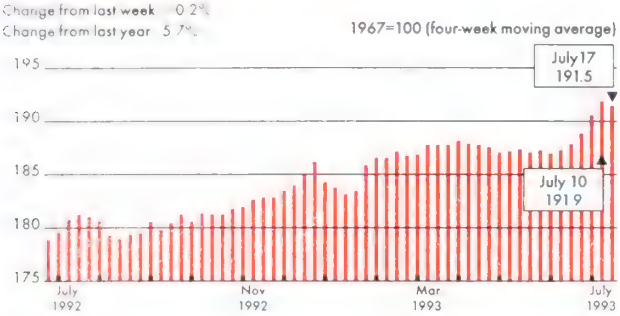
ness Week (ISSN 0007-7135) published weekly, except for one issue in January, by McGraw-Hill Inc. U. S. subscriber rate $44.95 per year. In Canada, one year: CDN $66. Single copies, $2.75; back issues, $5 cutive, Editorial, Circulation, and Advertising Offices: 1221 Avenue of the Americas, New York, N. Y. 10020. Second-class postage paid at New York, N. Y., and at additional mailing offices. Postage paid at ntreal, P. Q. Registration Number 9010. Title Reg. in U. S. Patent Office. **Postmaster:** Send address changes to BUSINESS WEEK, P. O. Box 430, Hightstown, N. J. 08520.

BusinessWeek Index

PRODUCTION

Change from last week: 0.2%
Change from last year: 5.7%

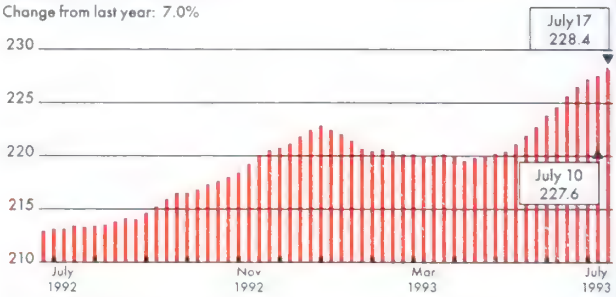


The production index dropped during the week ended July 17. Plant shutdowns for model changeovers caused sharp declines in autos and truck output, while coal output and rail-freight traffic suffered from continued flooding in the Midwest. Electric power production fell back after record use in the preceding week. Before calculation of the four-week moving average, the index dropped steeply, to 187.1, from 193.3 in the week before.

BW production index copyright 1993 by McGraw-Hill Inc

LEADING

Change from last week: −0.4%
Change from last year: 7.0%



The leading index rose during the week ended July 17, but the recent strength in the index is overstating the economy's future growth. That's because sales of commercial buildings by the Resolution Trust Corp. are causing faster growth in real estate loans. Elsewhere, higher stock prices, lower bond yields, faster M2 growth, and fewer business failures offset a decline in the growth of materials prices. Before calculation of the four-week moving average, the index rose to 230.1, from 228.7.

Leading index copyright 1993 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (7/24) thous. of net tons	1,873	1,853#	7.5
AUTOS (7/24) units	65,965	76,041r#	−2.6
TRUCKS (7/24) units	54,233	46,261r#	25.5
ELECTRIC POWER (7/24) millions of kilowatt-hours	67,993	68,739#	6.2
CRUDE-OIL REFINING (7/24) thous. of bbl./day	14,273	14,216#	2.0
COAL (7/17) thous. of net tons	16,772#	13,941	−5.6
PAPERBOARD (7/17) thous. of tons	822.3#	808.0r	4.1
PAPER (7/17) thous. of tons	772.0#	753.0r	0.4
LUMBER (7/17) millions of ft.	443.7#	336.6	−7.5
RAIL FREIGHT (7/17) billions of ton-miles	20.1#	17.4	−1.5

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA[1], SFPA[2], Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (7/28)	106	108	127
GERMAN MARK (7/28)	1.71	1.69	1.48
BRITISH POUND (7/28)	1.48	1.51	1.92
FRENCH FRANC (7/28)	5.85	5.80	5.00
CANADIAN DOLLAR (7/28)	1.28	1.27	1.18
SWISS FRANC (7/28)	1.51	1.50	1.32
MEXICAN PESO (7/28)[3]	3.119	3.122	3.098

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (7/28) $/troy oz.	393.150	392.400	9.8
STEEL SCRAP (7/27) #1 heavy, $/ton	118.50	118.50	33.9
FOODSTUFFS (7/27) index, 1967=100	208.6	205.8	5.0
COPPER (7/24) ¢/lb.	90.3	90.5	−24.8
ALUMINUM (7/24) ¢/lb	56.0	56.3	−8.2
WHEAT (7/24) #2 hard, $/bu.	3.29	3.27	−6.3
COTTON (7/24) strict low middling 1-1/16 in., ¢/lb	57.35	56.13	−6.1

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, *Metals Week*, Kansas City market, Memphis market

LEADING INDICATORS

	Latest week	Week ago	% Change year ago
STOCK PRICES (7/23) S&P 500	446.40	448.42	8.2
CORPORATE BOND YIELD, Aaa (7/23)	7.17%	7.16%	−11.0
INDUSTRIAL MATERIALS PRICES (7/23)	94.5	94.9	−4.1
BUSINESS FAILURES (7/16)	303	375	−22.5
REAL ESTATE LOANS (7/14) billions	$402.2	$402.3	−0.1
MONEY SUPPLY, M2 (7/12) billions	$3,481.8	$3,467.9r	1.4
INITIAL CLAIMS, UNEMPLOYMENT (7/10) thous.	328	333r	−22.1

Sources: Standard & Poor's, Moody's, *Journal of Commerce* (index: 1980=100), Dun & Bradstreet (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adjusts data on business failures and real estate loans

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Change year ago
ORDERS FOR DURABLE GOODS: MFG. (June) billions	$131.6	$126.8r	6.3
BUDGET SURPLUS OR DEFICIT (−) (June) millions	$11,096	−$36,957	193.2
IMPORTS (May) millions	$47,319	$48,660r	8.4
EXPORTS (May) millions	$38,953	$38,479r	8.3

Sources: Commerce Dept., Treasury Dept.

MONETARY INDICATORS

	Latest week	Week ago	% Change year ago
MONEY SUPPLY, M1 (7/12)	$1,084.7	$1,077.7r	13.4
BANKS' BUSINESS LOANS (7/14)	272.1	275.6r	−3.2
FREE RESERVES (7/21)	820	997r	11.6
NONFINANCIAL COMMERCIAL PAPER (7/14)	158.0	159.7	10.5

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed for a two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	Year ago
FEDERAL FUNDS (7/27)	3.01%	3.08%	3.18%
PRIME (7/28)	6.00	6.00	6.00
COMMERCIAL PAPER 3-MONTH (7/27)	3.23	3.08	3.38
CERTIFICATES OF DEPOSIT 3-MONTH (7/28)	3.18	3.16	3.32
EURODOLLAR 3-MONTH (7/23)	3.15	3.18	3.31

Sources: Federal Reserve Board, First Boston

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipment.
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

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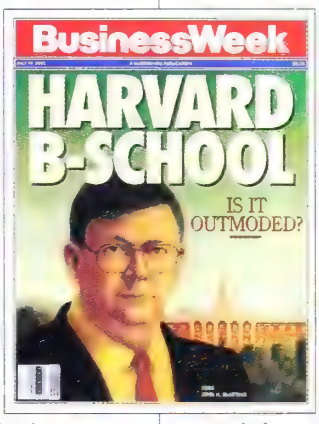
Readers Report

HARVARD B-SCHOOL: OUTMODED —OR AT THE HEAD OF ITS CLASS?

Our July 19 cover story on Harvard business school generated an unusually heavy volume of mail, much of it from graduates. While not every letter addressed directly the question of whether the B-school is outmoded, writers defending the school outnumbered those criticizing it by a margin of 2 to 1.

Your story is incomplete and inaccurate. Change has been one of the few constants in HBS's history. Over 50% of the concepts and content in the MBA program are different from 20 years ago, and more than 75% of the teaching materials have changed in the past decade. Half the electives have been conceived and developed in the past 10 years.



Among many important areas in which the article misses the mark, three stand out:

■ On the international front, it neglects to mention the path-breaking required first-year course "Business, government, and the international economy."

■ As BUSINESS WEEK wrote in an Apr. 6, 1992, story on ethics at HBS—but failed to report this time—HBS's commitment to ethics extends far beyond the required first-year module. Cases that raise important ethical issues are discussed in about 45 other classes in the first-year curriculum. In addition, five electives in ethics and corporate responsibility are offered in the second year.

■ The school's six electives in entrepreneurship are exceptionally popular with students. In addition, 25% of second-year MBAs are involved in field studies on new ventures, which also require presentations to senior executives. Not surprisingly, more than one-third of our graduates are running their own businesses 20 years after graduation.

The courses in international business, ethics, and entrepreneurship are manifestations of the continuing creation of intellectual capital and new fields of study at HBS. As a result, other schools and organizations worldwide adopt several million cases and other teaching materials from HBS annually.

Thomas R. Piper
Senior Associate Dean for
Educational Programs
Harvard Business School
Boston

It's nice to see you finally realize one of America's sacred cows isn't quite what it's cracked up to be. But your analysis of Harvard B-school missed a couple of reasons for its problems.

First, unlike other business schools in the U. S., Harvard has a strong preference for hiring its own PhD graduates as faculty. Most B-schools won't hire their own PhDs because they reckon the lack of new blood produces inbreeding and myopia.

Second, there is an informal rule at Harvard that professors can use only material written by Harvard faculty in their MBA classes. As far as they are concerned, the rest of the academic world doesn't exist. This institutional arrogance may explain why Harvard is no longer at the cutting edge of management education.

Charles W. L. Hill
Professor of Management
& Organization
University of Washington
Seattle

Alumni giving to Harvard business school exceeds $15 million annually. Participation rates for 5th and 10th reunion classes are in the 40%-to-50% range; for 25th reunion classes, they often exceed 75%. That extraordinary, unmatched level of financial support suggests that HBS alumni are very satisfied with the school's past performance and current direction.

Harvard MBAs typically receive 60% more job offers and starting salaries 40% above the averages reported for the 20 B-schools that BUSINESS WEEK

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ranks as the nation's best. The employers, here and abroad, which are Harvard B-school's ultimate customers, must, therefore, also be very satisfied. Harvard today cannot be complacent but certainly need not be apologetic.

John J. Nevin, '52
Former Chairman
Bridgestone/Firestone Inc.
Northfield, Ill.

There seems to be a persistent public misconception about the prestigious academic top spot almost unconsciously awarded to Harvard. This notion continues in the face of BUSINESS WEEK surveys awarding Northwestern University the first-place honors hands down. There seems to be a certain mystique unsubstantiated by the basic facts and "customers" of the universities.

Hugh J. Meeter
Grand Rapids, Mich.

Your article didn't crack the case. The school recognizes the need for continuous improvement to succeed. Congratulate Dean [John H.] McArthur. Don't impugn the school's reputation. A caption of "An American institution redesigning itself" would have been fairer than "An American institution in need of reform."

Most off the mark was the misrepresentation of HBS as a dysfunctional competitive jungle. Our experience five years ago suggested otherwise. The grading system was an appropriate parallel to the competitive pressures of business. It can be intimidating if one lets it be. In our section, 91 students chose to work as a team to ensure that everyone—international and domestic—could succeed. Judging from our recent reunion, they have.

Daniel F. O'Brien, '88
Boston
Richard D. Stamberger, '88
Washington

Your assertion that Harvard is a bit more Darwinistic than many of its competitors is fact. I would, however, venture to say that the climate inside the school is not unlike that of many globally competitive companies such as Ford and Motorola, where spirited debate and controversy spur creativity.

Ken Marzinsky, '92
Rocky River, Ohio

When I was a female student at the school, I never even thought about whether the protagonists in the cases were men or women. Yet the underrepresentation of women in case studies was mentioned no less than three times in your article. Come on

CORRECTIONS & CLARIFICATIONS

"A deal that's looking dubiouser and dubiouser" (Finance, July 26) incorrectly stated that Hess's Department Stores recently left bankruptcy court. Hess's has not been in bankruptcy court, but it has restructured $85 million of debt with creditors.

would be scary if the school responded to your criticism.

Shelley Goldberg, '94
New York

The criticism that cases do not feature enough female role models is true, particularly given the number of successful women leaders who happen to be Harvard B-school alums, such as Ellen Marram, former president of Nabisco Biscuit Co. Too bad BUSINESS WEEK didn't choose to include any of those women on its list of high-powered grads.

Harvard is said to rest on its laurels and produce graduates who do not have the tools to help move American business back to the cutting edge. It's funny, then, that so many graduates are founders or key players at U. S. growth companies—retailers Staples and Mothers Work and satellite-launcher Orbital Sciences are some that come to mind.

Barbara E. Miller, '92
Baltimore

As one who has known Dean McArthur as a student and as an alumnus, your insinuation that he and Jim Cash [chairman of the MBA program] do not serve their constituency in a hands-on, concerned fashion is both unfortunate and unfair. As a matter of fact, 5 of our 11 management-committee members attended the business school. Fortunately, they all have sufficient humility to know that they can't deal with any problem without having the experience up front.

Student arrogance and bloated salaries to inexperienced graduates are issues. John, Jim, and their team will address these issues as they have countless others.

Thomas G. Sternberg, '73
Chairman and CEO
Staples Inc.
Framingham, Mass.

McGill University Professor Henry Mintzberg has contributed as much or more to management thinking in the past 25 years than Peter Drucker, Mike Porter, Kenichi Ohmae, J. Brian Quinn (or Tom Peters). Yet he comes from north of the border, so we don't hear very much about him. In fact, America's leading business magazine, in its cover story on Harvard business school, couldn't even figure out how to spell his name: It should be Mintzberg, not Mitzberg.

Tom Peters
Palo Alto, Calif.

The real beauty of the case-method approach is that it forces the student to grapple with extremely complex and difficult management issues. Lectures are given where appropriate, but nothing is spoon-fed to the students at Harvard. Maybe some students gripe, but they are the minority. Most love the challenge, since it mirrors the real world: Most managers face ambiguous, difficult, challenging situations. Cases are laid out to be ambiguous, difficult, and challenging.

Steve Farrell, '94
Belmont, Mass.

On behalf of all Harvard B-school alumni, I apologize profusely for the decline of American business. We probably didn't get enough fiber in our diets.

Leonard Dick, '90
Santa Monica, Calif.

Your story has a serious omission in the criteria you used for grading business schools. A major challenge is to educate business leaders to capitalize on the exponential change in technology. For example, by the year 2010, there will be yet another thousandfold improvement in computational power. We believe business schools should emphasize the implications of technological change for the engineering and manufacturing of products, processes, and ultimately for determining the competitive position of business.

Robert S. Sullivan
Dean, Graduate School of
Industrial Administration
Stephen W. Director
Dean, Carnegie Institute of Technology
Raj Reddy
Dean, School of Computer Science
Carnegie Mellon University
Pittsburgh

Students, American businesses, and other B-schools eagerly await Harvard's overdue renaissance for the future it augurs for us all.

Nanette Fondas
University of California
Riverside, Calif.

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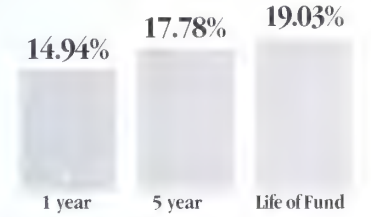

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A DIFFERENT MIRROR: A HISTORY OF MULTICULTURAL AMERICA
By Ronald Takaki
Little, Brown • 576pp • $27.95

FILLING IN THE BLANKS IN AMERICA'S HISTORY

Ronald Takaki opens *A Different Mirror: A History of Multicultural America* with an anecdote that will be all too familiar to many Asian Americans. A white taxi driver in Norfolk, Va., asked how long Takaki had been in the U. S. Even after the third-generation Japanese American replied that he had been born in this country, the cabbie complimented him on his excellent English.

Takaki laments that so many Americans equate American identity with European heritage. In fact, by early next century, less than half the U. S. population will be of European ancestry. Yet recognition of this growing diversity has come remarkably slowly. Ignorance about other groups, for instance, fed the friction and hatred among blacks, Hispanics, Asians, and whites that underlay last year's riots in Los Angeles.

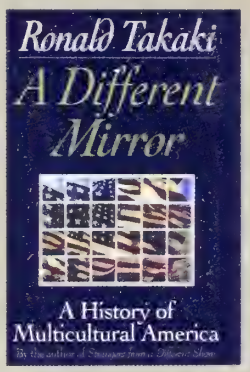
Takaki, an ethnic studies professor at the University of California at Berkeley whose books include *Strangers from a Different Shore: A History of Asian Americans*, here seeks to rewrite the American past to include neglected tales of Americans of African, Irish, Mexican, Asian, Jewish, and Native American descent. To be omitted from history, he says, can produce, in the words of poet Adrienne Rich, "a moment of psychic disequilibrium, as if you looked into the mirror and saw nothing."

Takaki hopes that by writing history that's more inclusive, historians can help temper race-based frustrations and misunderstandings. But his admirable goal is undermined by a tendency toward emotional manipulation. His unremitting depiction of oppression will have readers reaching alternately for their hankies and their protest placards.

Takaki disputes recent works by thinkers such as Arthur M. Schlesinger Jr., Allan Bloom, and E. D. Hirsch, who have bemoaned the trend toward multicultural studies. These authors have contended that championing the histories of different groups is divisive, that for disparate peoples to function as one nation, they must adhere to one dominant culture—which in the U. S. is Anglo-American. Takaki counters that as the composition of the U. S. changes, so must its national identity and culture, lest those left out feel disenfranchised.

Takaki's highly readable, broad-ranging history, which begins with the founding of the colonies, often amounts to a synthesis of such other works as Irving Howe's *World of Our Fathers* and Dee Brown's *Bury My Heart at Wounded Knee*. But these engaging tales—animated by eyewitness quotations and vivid detail—can draw readers into exploring these histories further.

This vivid attempt to include neglected minorities would be even better without the emotional overkill



Takaki's stories are united by a single theme: that racism in the U. S. "has historically set apart racial minorities from European immigrant groups." Readers can weep in outrage over the mistreatment of Native Americans, including the 1838 relocation of Georgia's Cherokees west of the Mississippi—the forced march known as the Trail of Tears, during which thousands perished. Similarly, Takaki explores the indignities heaped on Mexicans exploited as contract laborers in the U. S. He describes the back-breaking plantation jobs done by Japanese in Hawaii, the dangerous work of building railroads done by Chinese in the West—and the discrimination both groups faced. He depicts the hardships of black slave life in America and the racism that met the black migration north early in this century.

Takaki's stories of European immigrants provide a contrast. While acknowledging the hardships these people suffered in their homelands and after immigrating, he notes that they eventually found success and acceptance in the New World. Russian Jews, for example, who had endured violent pogroms, also met discrimination in the U. S.—including quotas restricting their entry to elite universities—but in time, many attained success as professionals and intellectuals. And by the early 1900s, Irish Catholics, who fled to America to escape English oppression, "were attending college in greater proportion than their Protestant counterparts."

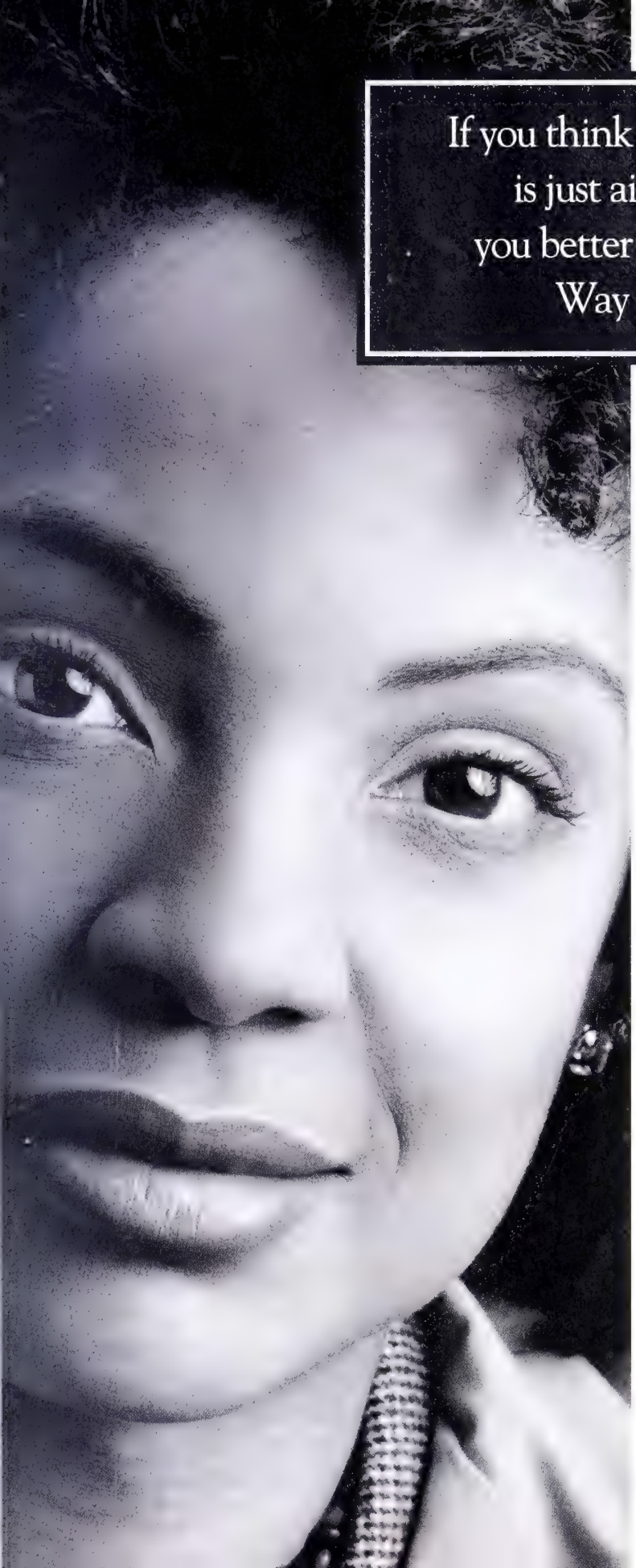
At times, Takaki simply goes overboard. Just below the surface of his book, a diatribe against racism and the exploitation of workers is waiting to break through. He could better counter criticisms of multicultural studies as thinly veiled politics if he were more dispassionate. After describing an 1814 battle in which Andrew Jackson's soldiers killed 800 Creeks and made reins from their skin, for instance, Takaki quotes a letter from Jackson asking his wife to tell Little Andrew that he would bring home bow and quiver souvenirs. The sickening juxtaposition perhaps rightly paints Jackson as a racist with no empathy for his enemy. But pages of such narrative end up eliciting only negative, divisive emotions rather than the harmony Takaki says is his aim.

Nonetheless, even the trivia in Takaki's account provide a sense of the many threads woven into the American past: There is evidence, he says, that the word "Yankee" comes from Cherokee and Delaware terms. The Bing cherry was developed by a Chinese immigrant named Ah Bing. American Indian troops confounded Japanese decoders during World War II by sending messages in their own languages.

Despite its shortcomings, Takaki's book does effectively convey the idea that America's identity embraces people of many different backgrounds. Here in lies the value of multicultural history—a broadening of perspective that helps us live together in the present.

BY CATHERINE YANG

Yang covers legal affairs from Washington.



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NAFTA: THE POLLUTION ISSUE IS JUST A SMOKESCREEN

BY GARY S. BECKER

As Mexico's per capita income grows, so will its spending on the environment and its human capital. And because more *maquiladoras* will move to the interior, that means less cross-border pollution

Opponents of the North American Free Trade Agreement (NAFTA) in the U. S. claim that weaker environmental and labor market regulations in Mexico give an unfair advantage to producers there. Although calls for a level playing field between developed and developing nations are politically seductive, weaker regulations in the latter do not justify trade restrictions.

Consumers in all countries gain from free trade. Those in developing economies benefit when they get easier access to the high-quality goods that rich countries produce. As long as the goods are safe, consumers in developed nations generally don't care if goods imported from poorer countries are cheaper because they have fewer labor-market and environmental regulations.

Some people argue that free trade produces an "artificial" division of labor among countries because it encourages exports based on weaker environmental and other regulations. But it is as natural for poorer nations to spend less than richer ones on clean air, minimum-wage laws, and other regulations as it is for them to spend less on education and training. No one complains, though, that world specialization is greatly influenced by differences in investments in human capital.

GREEN INK. Studies have shown a strong positive relation between a country's per capita income and its spending on preserving the environment. Such expenditures have already grown sharply in Mexico under the government of President Carlos Salinas de Gortari to more than 1% of its gross national product. Since NAFTA will benefit Mexico, it will increase that country's efforts to protect the environment.

The U. S. has a legitimate concern about Mexican pollution that spills over the border. This is one reason why NAFTA contains so many environmental provisions that it may be the greenest treaty ever negotiated. A glaring example of transnational effects is the extensive pollution from the *maquiladora* program established in the 1980s that permits factories on the Mexican side of the border to export freely to the U. S. One advantage of NAFTA is that it will lessen border pollution because some *maquiladora* plants will move to the interior, since they will no longer have to be along the border to get access to the U. S. market.

The White House and many members of Congress want to have a NAFTA commission that will investigate whether certain imports from Mexico result from weaker environmental and labor regulations there. But the political process cannot determine objectively which goods have succeeded in penetrating into a market because environmental and other regulations are less extensive in exporting nations. The investigations into dumping of goods by foreign producers in the U. S. and Europe is not reassuring, for these have been dominated by political considerations, not by careful analysis of the evidence.

In considering NAFTA and other trade agreements, it is important to recognize that labor-market, and even some environmental regulations have become excessive in most developed countries. Free trade curtails some of the excesses because developed countries then have to compete harder against imports from developing nations. Unions and several powerful lobbying groups in the U. S. oppose NAFTA partly because it will cut back their influence over policy.

Regulations desired by most citizens do not get enacted in developing nations controlled by dictators or cliques. It may be sound policy to curtail trade with these countries, just as many nations refused to trade with apartheid South Africa. But political democracy prevails now in Mexico, Chile, Argentina, much of eastern Europe, and many other parts of the developing world looking for access to better markets, so popularly demanded regulations will tend to get enacted there.

Workers and consumers in democratic nations should be free to make their own judgments about the quantity and kinds of regulations that are required without undue pressure from economically powerful nations. This is an especially sensitive issue in negotiations between the U. S. and Latin American countries because in the past the U. S. has sometimes dictated their domestic policies.

MUCH ADO. Undoubtedly, NAFTA will harm certain sectors of the U. S. economy, for some plants will be moved south after Mexico receives greater access to the U. S. market. The perennial complaint of business and unions about unfair competition is politically more potent when imports come from economies with less onerous regulations.

However, the Office of the U. S. Trade Representative found only 11 U. S. industries out of more than 400 examined that would be vulnerable under NAFTA to differences in environmental rules, lower tariffs, and other regulations. Although one can quarrel a bit with their conclusions, it is clear from this and other studies that the treaty will have a small although overall positive impact on the U. S. economy. NAFTA will help the U. S. and will not encourage unfair competition from Mexico. The U. S. should sign the treaty quickly and without further modification.

GARY S. BECKER, THE 1992 NOBEL LAUREATE, TEACHES AT THE UNIVERSITY OF CHICAGO AND IS A FELLOW OF THE HOOVER INSTITUTION

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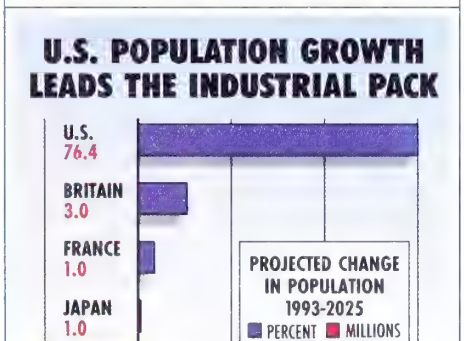
BY GENE KORETZ

THE UPSIDE OF AMERICA'S POPULATION UPSURGE

If demography is destiny, then America's economy in the next century may be very different from that of its chief trading rivals. Almost alone among industrial nations, the U. S. now looks forward to sizable population growth through 2050 and beyond.

This prospect was underscored by new Census Bureau projections released last year. As recently as 1989, the agency had predicted that the population of the U. S., about 258 million today, would peak at about 302 million in 2038. But now, it anticipates that the population will hit 383 million by 2050 and keep growing.

This picture is in sharp contrast to other industrial nations, where growth is now grinding to a halt. While the world is adding a record 90 million people a year, almost all of that growth is in developing nations. "The only major exception is the U. S.," says Carl Haub of the Population Reference Bureau. (Canada and Australia are also growing, but their populations are only 17% of the U. S. total.)



Why is the U. S. the odd man out in the industrial world? Haub notes that the U. S. fertility rate, which had dipped below the population-replacement level of 2.1 children per woman in the 1970s, has moved back close to that level. By contrast, the fertility rate averages only 1.5 to 1.6 in Japan and Europe.

At the same time, U. S. immigration, enhanced by liberalized legislation a few years ago and by a sizable influx of illegal immigrants, is now on a par with the great migrations of the early 20th century. The U. S. now absorbs 1 million immigrants a year, which amounts to 1 out of every 100 people added to the world population. Meanwhile, other industrial countries are in the process of closing their doors to both legal and illegal immigrants.

The growing opposition among Europeans—and among more and more Americans—to further immigration reflects tensions spawned by the high unemployment plaguing the industrial world. But the more liberal U. S. policy could turn out to be advantageous in the long run.

For one thing, other industrial nations must cope with static or declining labor forces. By 2025, for example, Japan will lose 12.2 million people age 15 to 64, Germany 4.5 million, and Italy 4 million. But the U. S. will actually add some 38 million.

More important, all advanced nations face rapidly aging populations and a sharp drop in the ratio of working-age people to the elderly early in the next century. Because the U. S. baby boom generation is now entirely in the labor force, there are more than five Americans 15 to 64 years old for each older person, compared with an average ratio of only 4.3 to 1 in Western Europe.

Although most of America's baby boomers will be age 65 and older by the year 2025, current projections indicate that the U. S. ratio will still be higher than that of most other advanced nations—holding at about 3.3 to 1 in the U. S., compared with 2.9 to 1 in Britain, 2.7 in France, 2.5 in Germany, and just 2.3 in Japan, where 30% of the population will be elderly. "America's high fertility and immigration could prove to be a big plus in the decades ahead," says economist Philip Suttle of Morgan Guaranty Trust Co.

With Rochelle Shoretz in New York

EARLY SIGNS OF A REBOUND IN THE GLOBAL ECONOMY

There's now light at the end of the global economic tunnel, reports the Center for International Business Cycle Research at Columbia University. For the first time since mid-1990, the center's leading index for 10 key countries excluding the U.S. has begun to move higher. "Since there is an average lag of six months between movements in the index and actual economic activity," says a spokesman, "we should see a perceptible improvement in overseas economies by early next year."

AFTER THE FLOOD OF '93: THE DROUGHT OF '94?

Although Midwest floods are causing deep local pain, most experts see little impact on the overall economy. But watch out for the weather next year. Economist Sam Nakagama notes that a sunspot cycle appears to have caused severe U.S. droughts every 20 to 22 years since the mid-1930s. The last one, in 1974-76, had a devastating impact on inflation. Nakagama buys the theory that dust from Mount Pinatubo's eruption may have caused this year's unusual weather patterns. But if that effect wanes by next year, the 20-year drought cycle could return with a vengeance.

THOSE SOAK-THE-RICH TAXES WILL SOAK...THE RICH

Higher income taxes won't hurt consumer spending, argues economist Maury N. Harris of PaineWebber Inc. He notes that the proposed higher marginal rates, which kick in on joint filers' taxable incomes over $140,000 and single filers' incomes over $115,000, apply to adjusted gross incomes minus deductions. And his analysis of the 2.6 million returns filed in 1991 with adjusted gross incomes between $100,000 and $200,000 indicates that typical joint filers (90% of six-figure returns are joint returns) do not report $140,000 in taxable income until adjusted income is around $180,000.

Thus, Harris estimates that virtually all of the collections stemming from higher marginal tax rates will be paid by those with adjusted incomes over $200,000 (about 1% of taxable returns). And three-quarters of the take will come from those over $500,000.

Similarly, the new marginal rates will affect relatively few businesses paying individual income taxes, claims Harris. Of the 8.8 million individual returns including Schedule C income in 1991, only 183,000 reported adjusted gross income exceeding $200,000, he reports. And only 162,000 returns reporting income for partnerships and Subchapter S corporations on Schedule E had adjusted income over $200,000.

In short, says Harris, the higher rates will affect only a small minority of taxpayers. And "since most of these generally earn much more than they spend, concern about a severe dampening effect on consumption appears misplaced."

ERIC HOFFMAN/BW

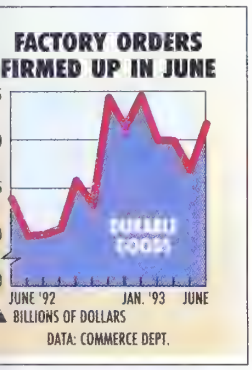
UGUST 9, 1993

BY JAMES C. COOPER AND KATHLEEN MADIGAN

ALL THAT CORPORATE CUTTING S GIVING CONSUMERS THE CREEPS

Moderation in all things, counseled the Roman author Terence. But that's a lesson the U. S. economy hasn't learned very well. In the 1980s, it as an excess of government spending, private debts, nd commercial real estate. For the 1990s, the obsession is ost-cutting.

More than two years into the recovery, many compa-es—both ailing and healthy—are still slashing payrolls nd squeezing benefits to lift profits. And while such ps and tucks enhance individual corporations and should ventually lift productivity and competitiveness, the imme-iate payoff is not attractive to the economy as a whole.



The problem: Corporate America's gain is Household America's pain. While companies have done a fine job reining in labor costs, workers are left with less money to spend in an economy that is largely driven by consumer purchases.

Today's widespread layoffs are cutting more than household buying power. Announcements such as IBM's July 27 disclosure that it ill release 35,000 more workers by the end of 1994 also aise job anxieties among consumers who aren't Big Blue mployees. The drop in consumer confidence, which contin-ed in July, means some shoppers are postponing their uying plans, further undercutting domestic demand.

WAGE GROWTH STOPS FALLING

Delayed buying plans are one reason why the factory sector has been a disappointment, but that could be changing. New orders taken by durable-goods manufactur-rs increased a solid 3.8% in June after a string of three ionthly declines (chart). Demand for aircraft accounted or two-thirds of the increase, but orders for electrical ma-hinery and primary metals also rose.

But even with the June pickup, manufacturers won't be unning at full speed soon. Orders for the entire second uarter declined at a 7.4% annual rate, and the order acklog fell 0.8% in June, the fourth drop in a row. A full actory turnaround depends on consumers maintaining heir sturdy second-quarter pace of spending.

That's why the improvement in consumer fundamentals uch as jobs and income is so crucial to the outlook. De-pite corporate belt-tightening, the U. S. economy has dded nearly 1 million jobs so far this year. Moreover, vage growth is finally showing some upward tilt. Both trends will help consumer spending in the second half.

The Labor Dept.'s employment-cost index shows the progress that companies have made in controlling their costs in recent years, but it also shows that the slowdown in labor costs is probably over.

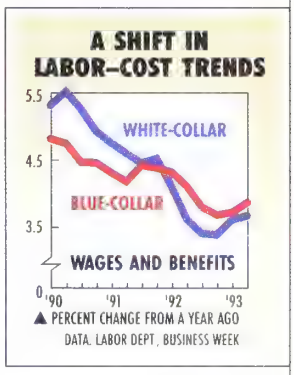
Total employment costs for civilian workers—including both wages and benefits—rose 0.9% in the second quarter, or 3.6% over the past 12 months. That's about the same pace as in each of the four previous quarters. Prior to that leveling off, the annual growth rate of labor costs had been in a steady decline since hitting a peak of 5.4% three years ago.

The second-quarter breakdown shows that wages rose 2.8% from a year ago. That was a shade better than the first-quarter rise of 2.7%, which was up from the 2.6% yearly pace in the fourth quarter of 1992. As small as the advances are, yearly wage growth has not accelerated for two straight quarters since early 1989. Benefits were up 5.5% from a year ago. That's still a rapid pace, but it's well below the 7.4% growth rate in early 1990.

BENEFITS BUMP UP BUSINESS COSTS

Even though wage growth has stabilized, continued corporate downsizing is evident in the latest cost trends. Middle management is still getting hit hard by cutbacks. So it's not surprising that compensation of white-collar workers has been growing more slowly than that of blue-collar professions since 1992. In the second quarter, employment costs for white-collar positions rose 3.6%, below the 3.8% for blue-collar jobs (chart).

Manufacturing costs were up a large 4.4% in the year ended in June, but the rise obscures the effects from downsizing. Factory wages rose by only 2.9% during the past year. That's down from the 3.5% increase of a year earlier, and the pace reflects shrinking payrolls as well as smaller wage gains.



Factory raises may get even punier. The government's latest survey of major collective-bargaining settlements showed that all contracts negotiated in the second quarter provide for annual wage increases of 2.7% over the life of the contract. But for manufacturing, unions were able to win pay raises averaging only 1.5%.

So what caused the strong advance in factory compensation? Benefits. They jumped 7.1% over the past year, up

from 6% in June, 1992. Indeed, ever-swelling benefits is the toughest cost-cutting problem for all companies.

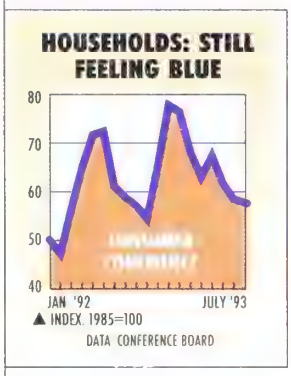
The proportion of all compensation devoted to benefits rose sharply in the 1960s and 1970s and has crept up ever since. In 1987, benefits accounted for 26.8% of labor costs. For 1993, that share is up to 28.7%.

The increasing share of benefits explains the rising use of temporary workers, because temps needn't be paid benefits. But this trend also contributes to consumers' insecurity about jobs.

JOBS AND TAXES WEIGH ON CONSUMERS

That uncertainty, along with the unknowns of the proposed tax hikes in the Clinton Administration's budget plan, has been damaging to the consumer's psyche. However, there is a big divergence between how people say they feel and how they spend their money.

Consumers continued to lose faith in the future in July, according to the Conference Board. Its index of consumer confidence fell for the third month in a row, dipping to 57.7, from 58.6 in June. The index has fallen 26% from its post-election high in December (chart).



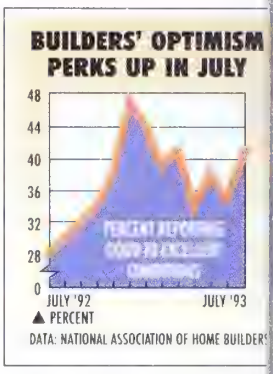
The board says jobs remain the greatest concern. In July, nearly 27% of those surveyed now fear that there will be fewer jobs during the next six months. That's up from 23% in June, and it's the most pessimistic reading in 16 months.

However, the latest survey reveals that households are a bit schizophrenic. While they continue to worry about the future, their assessment of current conditions is on a rising trend. The expectations component of confidence fell in July, but the reading for the present situation rose. In fact, since December, the expectations index has dropped 37%, while the present-situation index has increased by 17%.

Moreover, the drop in confidence last quarter is out of sync with the second-quarter pickup in consumer spending. Real outlays for goods and services rose at an annual rate of about 3%, and retail buying in July is off to a good start. Sales at department and chain stores rose 2.4% during the first three weeks of July compared with June, according to *Johnson Redbook Service*.

Consumer spending in the second half should also get a lift from the renewed strength in housing. Despite all the household pessimism over jobs and taxes, the cheapest mortgage costs in more than two decades are keeping home buying on an upward, if wobbly, trend.

The resale market clearly shows improvement. Sales of existing homes rose 1.9% in June, to an annual rate of 3.69 million. The June increase was the third jump in a row. In addition to the lift from low rates, the National Association of Realtors says that sellers are pricing their homes more realistically now. June sales were especially strong in the Northeast.



Sales of new homes also should show more life this summer. Builders were more enthusiastic in July, as 41% of those surveyed by the National Association of Home Builders called market conditions "good to excellent" (chart). That's the best reading in four months.

To be sure, cost-cutting mania has contributed to this recovery's historically weak performance. But it's the unusually sluggish pace of demand that has generated the push to tighten corporate belts. As demand continues to pick up—at least gradually—the need for further cutting will ease off. In fact, given the significantly faster pace of job growth in the first half of 1993, we may have reached that point already.

THE WEEK AHEAD

CONSTRUCTION SPENDING

Monday, Aug. 2, 8:30 a.m.

Construction spending probably increased by a modest 0.5% in June, according to the median forecast of economists surveyed by MMS International, a division of McGraw-Hill Inc. That would be slightly better than the 0.4% gain in May. Homebuilding should lead the advance. Nonresidential construction remains lackluster.

NAPM SURVEY

Monday, Aug. 2, 10 a.m.

The National Association of Purchasing Management's index of business activity likely stood at 48.8% in July, not much different from the 48.3% reading in June. That would be the second consecutive month that a low NAPM reading indicated that the industrial sector was contracting. Floods in the Midwest hampered factory activity in that region.

LEADING INDICATORS

Tuesday, Aug. 3, 8:30 a.m.

The index of leading indicators likely rose a scant 0.1% in June, following a 0.3% drop in May.

FACTORY INVENTORIES

Thursday, Aug. 5, 10 a.m.

Inventories held by manufacturers were probably little changed in June, after rising 0.3% in May. That's suggested by the decline in factory output for the month and the upturn in retail sales.

EMPLOYMENT

Friday, Aug. 6, 8:30 a.m.

The MMS survey calls for a gain of 150,000 new nonfarm jobs in July, a much stronger increase than the 13,000 added to payrolls in June. Construction jobs were probably skewed by the weather. The unemployment rate in July is expected to hold at June's 7% level.

INSTALLMENT CREDIT

Friday, Aug. 6

Consumers likely took on an extra $3 billion in credit in June, say the MMS forecasters. That's indicated by healthy car sales and other retail receipts. Credit fell $802 million in May but rose $3 billion in April.

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RESTRUCTURINGS

AUGUST 9, 1993

IBM: A WORK IN PROGRESS

ITS STRATEGIC DIRECTION REMAINS UNCLEAR

Louis V. Gerstner Jr. certainly isn't catering to his public. For more than three months now, since he took over as chairman and CEO of IBM, everyone from computer pundits to big investors has been seeking a grand strategy from Gerstner, seizing on his every word and leaked memo as a sign of where he is taking the world's largest computer company. Finally, on July 27, Gerstner gave them the news—and in spades: He announced a monster $8.9 billion restructuring charge against second-quarter earnings. And he wouldn't even promise that this would be the final blow—further restructuring will be needed if business worsens, he warned.

Then, Gerstner addressed the big question of strategy. "There's been a lot of speculation on when I will deliver a vision," Gerstner said. Next, the letdown: "The last thing IBM needs right now is a vision," he continued coolly. "What IBM needs right now is a series of very tough-minded, market-driven, highly effective strategies in each of its businesses."

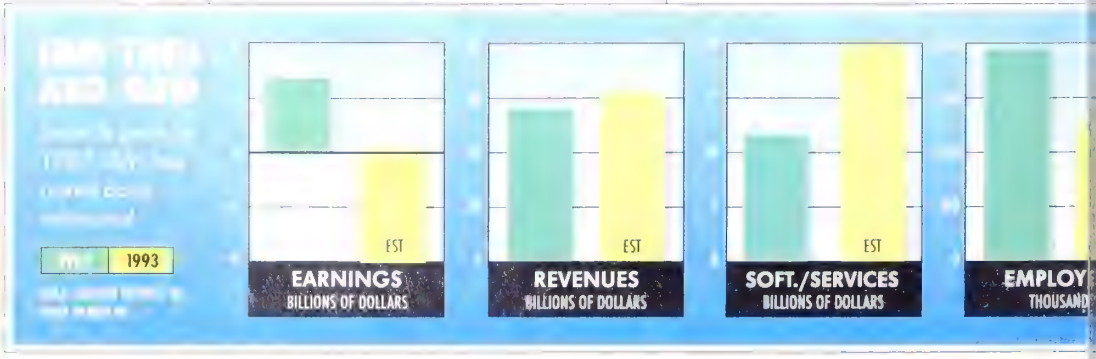
PRIORITIES. Gerstner made it clear that his priority now is execution—not visions issued from "40,000 feet in the air," as he puts it. His main goal: to make Big Blue profitable again. Toward that end, $6 billion of IBM's $8.9 billion second-quarter charge will be used to cover staff reductions. Some 50,000 employees—25,000 more than expected—took a buyout offer in the first six months of the year. Now, an additional 35,000 will be cut during the next 12 to 18 months. The remaining $2.9 billion of the charge will cover plant and office closings. Gerstner is giving almost no specifics on where, but he has put every division of IBM on notice that it must prove its value or face cuts. And IBM emphasized its new focus by choosing Emerson Electric Co. Chairman Charles F. Knight, who is known as a bear on costs, to serve on its board.

> Gerstner is giving almost no specifics on IBM's $8.9 billion restructuring charge

Wall Street already sees profits returning: In the wake of Gerstner's announcements, analysts were predicting $1.3 billion in profits for Big Blue in 1994. IBM's share price shot up 3 points, to 45⅝, though it fell back to 44 the day after Gerstner's announcement. Key outsiders also are convinced that Gerstner can make progess. IBM has "had a rocky road, and I don't think it's over," says Bill L. Fairfield, president of Omaha-based InaCom Corp., the largest reseller of IBM personal computers. "If Gerstner pulls the right strings, he could come out with flying colors."

Simply seeking profits, however, may not be enough. Some customers fault Gerstner for refusing to state clearly how he thinks IBM's technology and products are likely to evolve. IBM "has not articulated a vision that customers can buy into," says Peter J. Daboul, senior vice-president for information systems at Massachusetts Mutual Life Insurance Co. in Springfield, Mass. Daboul says that the failure is "absolutel hurting IBM. "They've just done a sh gun approach. They need to bring t gether a vision that maps where t technology is going."

Gerstner's biggest problem may that he is taking the helm just as sta dardized computer technology—whi allows customers to move from one su plier to another—is taking hold. The r placement of CEO John F. Akers wi Gerstner, and the prospect of a strateg shift at Big Blue, has many custome rattled. Now, Gerstner has a lot bridge-building to do with customer "The big thing that is missing there trust," says Robert J. Randall, micr



omputer coordinator for Universal oods Corp. in Milwaukee.

Rivals, meanwhile, are moving in for ie kill. When Akers said late last year iat the company would deemphasize iainframe investment, says Willem P. oelandts, head of Hewlett-Packard o.'s computer systems division, IBM istomers began switching to HP mini- omputers for the first time. One exam- le: Bard White, chief information offi- er at Spalding Sports Worldwide in hicopee, Mass., who bought a Hewlett- ackard machine early this year. "Cost- ise, IBM was way off base for the per- ormance they offered," White says.

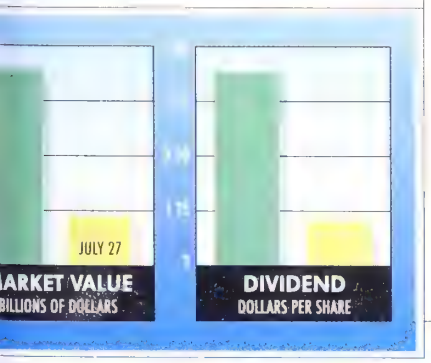
Some worry that further customer defections will follow if Gerstner doesn't articulate his strategy more clearly. IBM "has to decide what the company's about," and build the products to hit that target, says Steven A. Ballmer, a Microsoft Corp. senior vice-president. "It sounds like Gerstner's trying to do some good things to batten down the hatches. But I don't see the strategy, at least in software."

To be sure, Gerstner has his hands full dealing with the here and now. After General Motors Corp.'s $21 billion charge in 1992's first quarter, IBM reported the second-largest quarterly net loss in corporate history—$8 billion, or $14.10 a share. That was coupled with a 4.3% decline in quarterly revenues, to $15.5 billion, and a cut in the annual dividend to a mere $1 a share, from $2.16. In just about every IBM business, the trend during the quarter was down: Overall sales of computers and other hardware fell 12.9%. Demand, Gerstner says, is soft all over the world. Given the breadth of the troubles, Standard & Poor's Corp. downgraded IBM's debt.

UNSWERVING COURSE. Gerstner has defined some areas of technological emphasis for IBM, though he's just getting started. He singles out IBM's computer-chip manufacturing division as one area that can be counted on for more revenues. IBM is the world's biggest chipmaker, even though virtually all of its production is for its own consumption. In the 1970s, in a decision that still astounds many, IBM decided not to sell chips to outsiders. That decision may be reversed. "We want to find ways to leverage" the chip technology, Gerstner says. He says he also hopes to foster more projects such as the PowerPC, a personal-computer microprocessor co-developed with Apple Computer Inc. and Motorola Inc. that is poised to fight a pitched battle with Intel Corp.

Gerstner says he is also excited about the opportunities offered by the shift to servers, computers that act as a hub for networks of PCs. There, he undoubtedly sees opportunities to sell more high-margin mainframes and minicomputers, which IBM is pushing as the servers of choice. But he can't count on that part of the business to bail out the company. In the second quarter, revenues from AS/400s, 60% of which are sold as servers, declined vs. last year. The silver lining: The rate of decline was less than in the first quarter.

Some IBM watchers worry that Gerstner may be counting too much on mainframe sales, a longtime IBM fail-

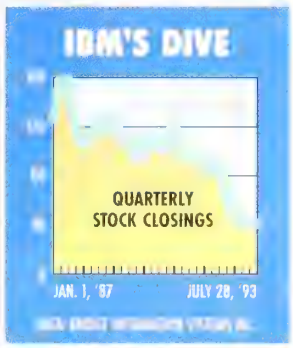


TIME TO LOAD UP ON BIG BLUE?

Put it this way: Even Bruce Donegan believes IBM's stock is a good buy now. A 44-year-old purchasing agent who was "surplused" in March from IBM's mainframe plant in Poughkeepsie, N. Y., Donegan is still hanging on to some shares bought at 58 when he joined the company back in 1978. He's still a bit bitter about his termination, and he has watched his "little nest egg" become littler and littler. But Donegan says he has "faith that the company will come back as a different IBM."

Other investors seem to be getting the same idea. On July 27, the day IBM's new CEO, Louis V. Gerstner Jr., announced an $8.9 billion restructuring charge and slashed the dividend, the stock jumped more than 3 points, to close at 45⅝. It retreated the next day, to 44. But many investors think IBM's shares have finally hit bottom.

Is the worst over? Gerstner made no promises. And many analysts think an IBM buy has to be seen as a long-term gamble. In the short run, the shares could drop below 40, worries PaineWebber Inc. analyst Stephen Smith. IBM's book value is now under 35, he says. And his 1994 earnings forecast of $1.50 a share does not justify paying the company's current price.



A few analysts are bullish, however, on the rationale that IBM is switching its focus to faster-growing parts of the industry. Daniel Mandresh of Merrill Lynch & Co. says 1993 will be the first year that IBM's revenue from workstations and PCs will surpass the declining businesses of large systems and storage gear. "You buy IBM on the perception of change," he says.

Among those who are taking that advice is Michael H. Steinhardt, who heads New York-based Steinhardt Management Co. Citing "extraordinary changes in cost structure," he has doubled his IBM holdings since March, to more than 4 million shares. On July 27, he bought more. Steinhardt figures Big Blue is a big bargain.

By Evan I. Schwartz in New York

ing. Gerstner says predictions of the mainframe's death are exaggerated—a controversial conclusion. A recent survey by consultants Forrester Research Inc. found that 34% of the 1,000 largest U.S. companies are against using the mainframe as a server for PCs, citing the expense. Worse yet for IBM, 20% see "no future" for their mainframes. "IBM's current attempt to reposition the mainframe as an 'enterprise-wide server' is falling on deaf ears," says the survey.

Gerstner, of course, may still come up with more ideas. He says he is at the beginning of his learning curve and that the $64 billion IBM is far more complex than RJR Nabisco Inc., the $16 billion company he ran before. "It's geometrically more difficult," he says. Even so, Gerstner doesn't plan to share the job. He says he will not name a president, as had been speculated. Instead, he will depend for advice on a circle of executives that has yet to be completely formed.

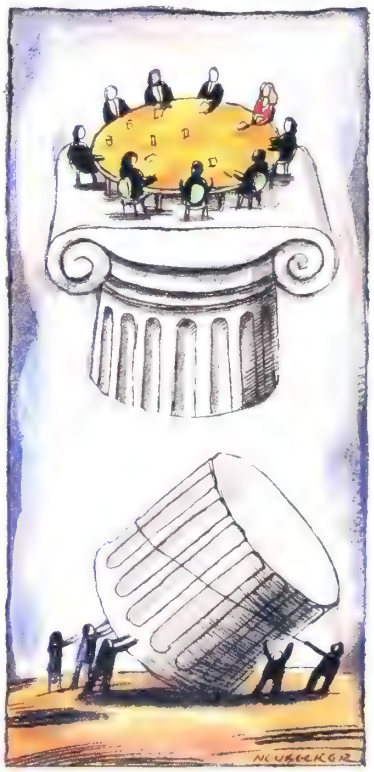
The upshot: For now, IBM is a work in progress. The vision will have to wait until the hard work of restructuring is done.

By Catherine Arnst, with John Verity, in New York, and bureau reports

Commentary/by Judith H. Dobrzynski

CORPORATE BOARDS MAY FINALLY BE SHAPING UP

When IBM's board met on July 27, it faced a full agenda: consideration of a raft of rescue measures designed by Big Blue's new chief executive, Louis V. Gerstner Jr. So it's telling that directors still took time for a separate issue that's not nearly as critical: changes in the boardroom. Besides adding a director—Emerson Electric Co. Chairman Charles F. Knight—the board created a "directors and corporate governance" committee. Headed by James E. Burke, the retired Johnson & Johnson CEO who led the search for Gerstner, the panel will nominate directors and begin regular communication with investors.



The move speaks volumes about the changing corporate milieu. Last winter, critics blasted these directors for waiting so long to hold former CEO John F. Akers accountable for IBM's dismal performance. Now, they're reaching out, trying to show that they do have shareholders' interests at heart. "This is music to my ears, assuming it happens. It shows they really are serious about corporate governance," says Richard H. Koppes, general counsel at the California Public Employees' Retirement System (CalPERS).

Other companies, too, are getting serious about governance, as two new studies confirm. Both Korn/Ferry International, which polled 327 large companies, and Spencer Stuart & Associates, which canvassed 55 of the biggest companies, say that boards are getting smaller—heading toward the dozen members experts believe is optimal. At IBM, for example, though 4 of 18 members recently retired, only Knight was added. Smaller boards can more easily discuss issues. And individuals in small groups take responsibility more personally.

Both studies also show that boards continue to cut insiders in favor of outsiders, and they're starting to add foreign members. These are obvious pluses, given the need for director independence, and the increasingly global economy.

It's those outsiders, in general, who comprise both compensation and audit committees. But many nominating panels still include an insider—nearly half of Spencer Stuart's sample. Korn/Ferry found that although search firms and large shareholders suggest board candidates about twice as often now as in 1988, other board members and the CEO still supply directors about three-quarters of the time.

Thanks to prompting from CalPERS and the United Shareholders Assn., IBM delegated the job of selecting directors to its compensation committee of all outsiders early this year. Contrary to speculation that Gerstner would be allowed to select new members of the board, Big Blue says the committee picked Knight.

Boards are starting to gain independence for another reason: More companies are paying directors partly in stock, or at least extending that option. Only one surveyed, Primerica Corp., remits the entire fee in stock. Still, if the trend lines continue, outside directors will have more and more reason to identify with the shareholders they represent rather than the CEO they oversee. CEOs see this coming: According to Korn/Ferry, 82% of the CEOs surveyed believe that "pressure from institutional investors will cause corporate boards to become increasingly critical of management performance."

"SOMEONE'S WATCHING." Where, then, do reformers go from here? They're likely to keep plugging on such issues as independent nominating committees, payment in stock, and splitting the job of chairman and CEO, or at least designating a lead director, such as Burke at IBM. But now that change is afoot on these procedural fronts, unhappy investors will, like Gerstner, probably pay even more attention to performance. "My sense is that we've had a fairly wide impact on director behavior, and the question is how do you keep it up," says Sarah A. B. Teslik, executive director of the Council of Institutional Investors. "You want every board to know that someone's watching them."

That, no doubt, will take both vigilance and savvy. Investors are likely to demand more information about boardroom practices, to seek more data about individual directors and their boardroom contributions, and to push boards to enlist members with few other directorships, instead of name-brand CEOs who are already overextended.

The emphasis on performance certainly worked at IBM. And, unlike procedural initiatives, that is something even governance cynics can't belittle.

Dobrzynski covers boardroom issues.

WHAT REALLY HAPPENED AT NORTHERN TELECOM

Quality problems and a power struggle left the company reeling

Perhaps in no industry but technology could a company fall so far, so fast. In January, everything eemed so right for Northern Telecom td. The phone-equipment giant anounced record results for 1992, and its hen-CEO and chairman, Paul G. Stern, xpressed optimism for the year ahead.

istomers are ing: 'You s are not as d as you d to be'"

C. MONTY

Stern's once obscure Canadian company had successfully stolen market share from industry leader American Telephone & Telegraph Co. in the U.S. (chart) and had established strong footholds in such fast-growing regions as Asia. His bold goal of unseating AT&T to make Northern the biggest telecommunications equipment supplier in the world by 2000 didn't seem too farfetched.

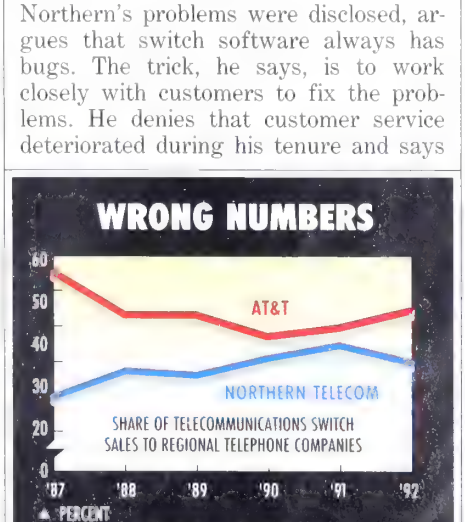
That vision unraveled quickly and dramatically. Days after the bullish earnings report, Stern bruptly announced he would step down s CEO to pursue other, undefined intersts. The former IBM executive was replaced by Jean C. Monty, a longtime excutive of Bell Canada. Then, on June 5, Monty dropped a bombshell: Northrn would post a second-quarter loss, its irst in almost five years. But Monty's varning didn't prepare investors for the ctual results, announced on July 21—a taggering $1.03 billion in red ink, due nostly to a $940 million charge against arnings to pay for 5,200 layoffs, plant onsolidations, and other items. The ompany blamed the cutbacks on increasingly tough price competition.

CUSTOMER COMPLAINTS. How did Northrn slip into a tailspin so severe that half ts stock market value has evaporated ince January? Simply put, a company amous for quality products and service et down some of its key U.S. customers, selling them shoddy goods while management focused instead on overseas expansion. Executives delayed a painful decision to revamp overly complex phone-switch software, compounding the problems. And there was tension between Stern, the cocky American CEO, and customers and employees of the company Canada regards as its high-tech treasure.

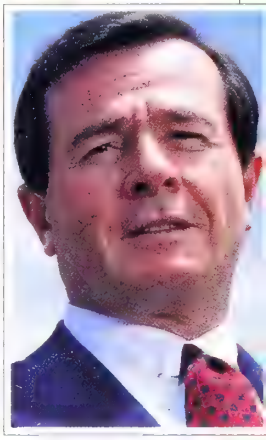
The trouble started sometime last year, when several major U.S. phone companies experienced problems with the software in Northern's phone switches, the computerized devices that direct calls at phone-company central offices. An executive at one of the companies, speaking anonymously, says Northern took too long to fix the glitches. According to analyst Michael Arellano of market researcher Northern Business Information, things got so bad that several Baby Bells went over Stern's head to complain to Bell Canada parent BCE Inc., which owns 53% of Northern's stock. Northern wouldn't comment on the assertion.

Even worse for Northern, some phone companies began to delay acceptance of the switches and software upgrades they had ordered, according to analysts and the phone executive. "It was really a way to get Northern to act," says Arellano. Northern subsequently delayed new versions of its software until the problems could be fixed, helping drive revenues down 4% in the second quarter, to $1.87 billion.

Stern, in his first interview since Northern's problems were disclosed, argues that switch software always has bugs. The trick, he says, is to work closely with customers to fix the problems. He denies that customer service deteriorated during his tenure and says he knows nothing about customer complaints to BCE. The former CEO has his own explanation for Northern's problems: The company, he says, lost momentum and its customer focus due to a string of executive changes following his own departure. "That destabilizes an entire organization," he says.



BLUNT STYLE. Monty and others tell a different story. Monty says he realized there was a problem soon after the board installed him last October as the company's No. 2 executive, naming him president and chief operating officer. In talks with customers and Northern managers, the software problems kept coming up. "Customers are saying: 'You guys are not as good as you used to be,'" Monty told BUSINESS WEEK. Bugs were not the only problem. Software sales also slowed as Northern was unable to issue new versions as quickly as in the past, he says. Updating with new features used to take six months; now, with each change requiring thousands of tests, it takes up to a year and a half. That's due to the complex, custom-written development of the software, compared with AT&T's standardized approach.



"Nobody is going to shove a president down my throat"

PAUL G. STERN

Monty says he proposed to Stern late last year a major software revamping and simplification. Stern agreed in principle, Monty recalls: "The issue was how much and how fast." Stern says he had studied the software revamping while he was still CEO but "I could never figure out how to do it" without disrupting operations.

Some observers speculate that Northern's customer problems drove Stern from the company. Stern denies that. "I was at no stage asked to leave or pushed out," he says. Stern says he resigned because Northern's board, apparently at BCE's behest, installed Monty without his consent last fall. "Nobody is going to shove a president down my throat," he says. Stern says Monty lacks international experience and a manufacturing background. His own candidate for the post: Edward E. Lucente, a former IBM colleague that Stern had brought in as a marketing expert. Lu-

cente is now at Digital Equipment Corp. Stern apparently had lost the support Northern's board, which is controlled by Canadians, including two BCE executives. A source familiar with the board's reasoning says BCE had concerns about Stern's blunt management style, which didn't sit well with some employees and customers and clashed with Canada's business style. At a time when Northern needed to improve its customer relations, Stern and Lucente were considered wrong for the job, the source says.

Now, Northern must mend fences with customers. There are hopeful signs: The company just signed a $102 million deal with China. But rewriting millions of lines of software to end the problems will cost $158 million. Monty says new software won't be rolled out until 1995.

Will that be quick enough? "They've got 18 months to solve their problems. That is about the time that their best customers will stand still" before shopping around, says Howard Anderson, managing director of telecommunications researchers Yankee Group Inc. Monty better hope his customers have at least that much patience.

By Bart Ziegler in New York

DEALS

IS THIS Rx TOO COSTLY FOR MERCK?

Its $6 billion Medco deal could leave it with some huge problems

Less than a year ago—back when the drug business seemed relatively upbeat—Chief Executive P. Roy Vagelos of Merck & Co. was turning up his nose at Medco Containment Services Inc. Medco demanded discounts from its pharmaceutical suppliers. Vagelos wouldn't give in, refusing to sell to the mail-order distributor. Instead, he bet that his own big sales force would keep industry leader Merck's sales soaring.

But drugmakers have been dragged into a radically new era, and Vagelos is talking a very different game now. The pell-mell growth of managed care, he says, will continue, requiring vertical integration up and down the pharmaceutical food chain. Hence, Merck's July 28 announcement that it plans to pay $6 billion in stock and cash for Medco.

This probably is not a merger that Merck investors will digest easily. Merck shares sank 1⅜ on the news, to 30¾, a 52-week low. Medco's stock gained 4⅜ but closed at 34⅛ on July 28—well below the $39 a share value implied by Merck's offer. "This is not a done deal," says Neil B. Sweig, a drug analyst with Capital Institutional Services.

DATA LODE. Beaming happily in New York's Waldorf-Astoria Hotel, Vagelos and Medco Chairman Martin J. Wygod shrugged off the early skepticism. "I think Merck needs Medco and Medco needs Merck because together, the combination is an offensive giant," Vagelos told BUSINESS WEEK. By acquiring the $2.2 billion-a-year distributor, arguably the nation's most tightfisted buyer of medicines, Vagelos expects to boost distribution of Merck's products significantly, even as he cuts sales reps. More important, he's hoping the deal will yield crucial market intelligence about Medco's 33 million U. S. customers.

But this bet has the makings of a costly long shot. For one, the deal could face a stiff antitrust review: Medco counts virtually every major drugmaker among its suppliers, and several are likely to object to Merck's influence. Even if Merck clears that hurdle, some of its competitors privately say they may well drop or cut back their dealings with Medco if Merck controls it. Says one rival executive: "Everybody is assessing their relationship with Medco as of today." Competing drugmakers may well seek out alternative distributors or develop their own. Wygod admits that "some manufacturers are going to look at this as a strong competitive move, and they will perhaps tie up with other pharmacy management companies."

If Medco risks losing customers, it's not clear to some observers just what Merck gains. For instance, Vagelos argues that the detailed information Merck would gain from Medco's enormous customer base could help aid efforts to research and market new products. "Merck needs to have closer links to health-care providers, patients, and to bill payers," he says. Yet some rivals insist that data services such as Walsh America/PMSI already provide similarly useful information. "There's a lot of data available, and you don't have to spend $6 billion to get it," says a high-ranking executive at one competitor.

SAFETY NET? Merck officials concede the deal would be costly. Merck plans to borrow up to $2.4 billion and issue some 112 million shares of stock to pay for Medco, offering shareholders $39 or 1.2 Merck shares for each Medco share. At about 5%, Medco's tight net margins will drag down the combined company's. According to Merck Chief Financial Officer Judy C. Lewent, the dilution of Merck's stock could last three years. Lewent argues: "We are comfortable making investments today that will allow the company to grow in the future."

Is this truly how Merck will grow? "Theoretically, in the long run, it's probably not a bad deal," says Mariola B. Haggar, a pharmaceutical analyst with Salomon Brothers Inc. "But that may not be apparent for a while." More than anything, Medco may represent insurance—a solid business to support profits at a time when there are few big prospects in Merck's development pipeline. To remain at the top of the drug industry, Merck still needs to produce new drugs that will pick up where its stars of the last decade are leaving off.

By Joseph Weber in Philadelphia, with Rochelle Shoretz in New York

MERCK'S VAGELOS

MEDCO'S WYGOD

MERCK AND MEDCO: THE BASICS

THE DEAL Merck acquires Medco Containment Services.

PRICE About $6 billion, 40% in cash and 60% in Merck shares. Merck will issue new stock and sell commercial paper and medium-term debt.

MERCK GETS a $2.2 billion pharmaceutical distributor, with a huge mail-order operation and access to 90% of U.S. pharmacies.

MEDCO GETS access to products from the world's largest pharmaceutical manufacturer, plus substantial market clout.

THE DETAILS Medco will keep its name and operate as a Merck subsidiary. Chairman Martin Wygod will join Merck's board and buy $32 million of Merck shares.

DATA COMPANY REPORTS

VW FIGURES ITS BEST DEFENSE MAY BE A GOOD OFFENSE

EO Piëch unleashes an attack on GM—risking his own credibility

Relaxed and boldly confident, Volkswagen's embattled chief executive, Ferdinand Piëch, finally ıced off against General Motors Corp. ı July 28. Since hiring former GM purıasing czar José Ignacio López de Arortua in March, spokesmen for the erman auto giant have fumbled and onewalled in the face of damaging GM llegations of industrial espionage gainst López—allegations he denies.

But at a packed press conference in W's hometown of Wolfsburg, Piëch ıarged GM with "mudslinging" and ıapped: "We will join in this mudinging, and we will emerge the vicors." He proved his point by implyg that GM may have tampered with vidence against López, a charge GM smisses as "absurd."

The German stock market immediely read Piëch's tough response as sign that the 55-year-old engineer ill be able to limit any damage caused VW by the López affair: VW's share rice jumped 3.4%, to 209, on the Frankırt bourse in the hours after Piëch's ppearance.

Yet VW-watchers wonder if loyalty to ópez isn't clouding Piëch's judgment. e insists that López is innocent—and ıat he's essential to VW's cost-cutting fforts, maybe to its survival. "Together ith me, he'll implement the structural ıanges without which our company has future," Piëch says. But, warns eorge Taucher, a management profesor at the IMD business school in Lauanne, Switzerland, "this very strong upport of [López] is extremely dangerus for the company and even for Ferdiand Piëch himself" if the allegations gainst López turn out to be true.

UDI MISSTEP. Indeed, crisis-manageıent experts question whether Piëch is oing enough to stem a looming credibily crisis for VW and its management. lready, there are warning signs that ublic opinion is turning against VW: A ırvey of 1,000 Germans by Dortmundased Forsa polling organization shows ıat 65% believe there is "something to" ıe allegations against López. Just 7% ay they think they are unfounded.

If Piëch wins this battle of words only lose in the marketplace, it won't be ıe first time. A scion of the Porsche amily who has spent his career in the uto industry, Piëch won just such a yrrhic victory in the last big crisis he faced. In the late 1980s, he was research director and then CEO of VW's Audi luxury-car unit when its Audi 5000 model faced allegations in the U. S. that it accelerated "unintentionally," causing accidents. Piëch defended the car, blaming bad American driving habits for the problem. Eventually, studies by U. S. and Canadian highway-safety authorities found that the cars weren't faulty. But by then, bad publicity had caused Audi's U. S. sales to plummet disastrously. Piëch's response, argues Karl Ludvigsen, chairman of London-based auto-industry consultants Ludvigsen Associates, "showed a certain arrogance in his attitudes."

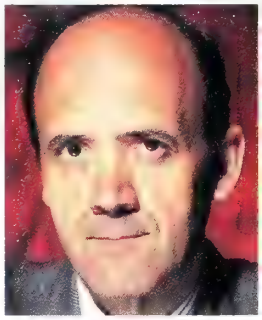
This time around, Piëch's stubbornness may reflect the enormity of his challenge. After a decade of headlong expansion that shot Volkswagen into the No. 1 slot in the European market, VW was in deep trouble when Piëch took over as CEO on Jan. 1. The company's costs were so high that at one point in 1992, it couldn't have turned a profit even if producing at 100% of capacity. Piëch declared the company "in crisis."

But by hiring López to help him pare costs, Piëch may have set himself up for one of the classic pitfalls in crisis management: "The solution to one difficulty puts you into even worse problems," says Ian I. Mitroff, head of the crisis-management unit at the University of Southern California.

DIFFICULT SELL. Although López' cost-cutting is already helping VW, he has been dogged from the beginning by GM's complaint that he and others stole confidential GM documents. The district attorney's office in the city of Darmstadt seemed to confirm GM's accusations when it discovered GM documents at the former home of Jorge Alvarez Aguirre, a former GM executive who followed López to VW. On July 22, the office confirmed that it is investigating López, Aguirre, and two other former GM employees now on VW's payroll, though none has been charged and all deny wrongdoing.

By meeting with the press, Piëch finally is facing the crisis head on. And experts applaud him for admitting that he has made some mistakes, such as attempting to silence the German weekly *Der Spiegel* with a gag order. But Piëch must quickly change public perceptions, or VW could slip into the terminal phase of a corporate crisis—when nobody believes what a company and its executives say. And combativeness may not be enough. Piëch may just have to start explaining what happened in much greater detail.

By John Templeman in Bonn, with Peggy Salz-Trautman in Wolfsburg



CEO PIECH (LEFT) BADLY NEEDS LOPEZ' COST-CUTTING SKILLS, BUT ALLEGATIONS THAT THE EXECUTIVE STOLE GM DOCUMENTS MAY HAVE CREATED A GREATER CRISIS FOR VW

A VW PLANT IN WOLFSBURG: AFTER A DECADE OF EXPANSION, THE AUTO MAKER IS "IN CRISIS"

FROM TOP LEFT: PHOTOGRAPHS BY PEGS BOSSU SIGMA; WOLFGANG WILDE MANAGER MAGAZIN; JAN PETER BONING ZENIT

AIRLINES

AIRLINE PROFITS: TAKE-OFF AT LAST

One positive quarter doesn't guarantee a smooth ascent

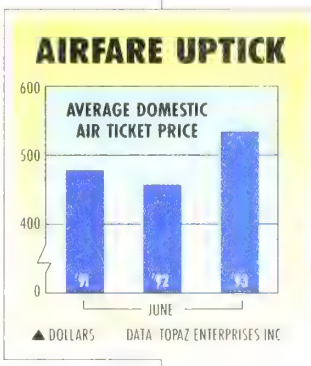
Until recently, profits in the airline industry had been about as rare as a decent in-flight meal. Then, in late July, a bunch of carriers, including the parent company of American Airlines Inc., announced that they had made money during the second quarter—some for the first time in two years. The good news took Wall Street by surprise and has started talk that the industry is reviving. And with fuel costs down, labor willing to exchange wage cuts for equity, and fares finally rising, the optimism seems warranted.

The key question: How long can the airlines stay on an updraft? The major carriers are still saddled with costly labor contracts and inefficient route systems that make it nearly impossible to compete with low-cost upstarts such as Southwest Airlines Co. And fare stability in an industry where ailing companies need quick infusions of cash is anything but guaranteed. Profits of $47 million by American, $7.1 million by Delta Air Lines, and $5.8 million by USAir Group Inc. may look swell compared with last year's stunning losses. But notes American Chief Financial Officer Michael J. Durham: "It's hardly the mother lode when you have $20 billion in assets deployed to earn that."

"PATHETIC." Worse, even today's skimpy profits may not be sustainable. The improvement comes mainly from higher fares and plunging costs. Cost-cutting helped lower unit costs during the quarter by 1.5% at American and 2.4% at Delta, where a work-force reduction of 7,000 since last year has chopped $265 million out of overhead. Meanwhile, yields, the amount a passenger pays to fly a mile, jumped 10.8% at American as fares stabilized and then rose slightly compared with last year. Growth in domestic business travel also helped.

The problem: What's needed for continued gains is lots more passengers. And with the leisure market still very soft, says Peter M. Sontag, chief executive officer of agency USTravel Inc., the carriers can't raise prices. Fares are up, but only as compared with a terrible 1992. Since January, says airfare auditor Topaz Enterprises Inc., the average fare has fallen $57, to $535 in June (chart).

Another worry is that second-quarter results were dressed up by a fair amount of financial legerdemain. USAir's skimpy profit, for instance, included $18 million in additional income generated after the company reversed an earlier write-down on retired aircraft. Similarly, Delta's decision to depreciate aircraft over a longer period of time—to 20 years, from 15—added $34 million to its bottom line. Debt ratings give a truer picture of the carriers' financial health: The huge losses of the past three years have driven the ratings on the debt of the Big Three carriers (American, United, and Delta) down to junk-bond levels.



LOW-COST AIRLINES SUCH AS AMERICA WEST ARE PACKING 'EM IN—AND ROCKING THE MAJORS

FAILURE OF WILL? Meanwhile, Southwest and America West Airlines Inc., and scrappy new entrants such as Kiwi, Reno, and Morris Air are prowling for more passengers. In mid-July, Southwest announced it would begin flying to the East Coast for the first time, initiating service from Baltimore—giving it a shot at the lucrative Washington market. New York could be next. "Competing with Southwest is a huge problem that's only getting bigger," frets a top Big Three executive.

Worst of all, profits, even paltry ones, could undermine the new détente between management and labor. At Trans World Airlines Inc. and Northwest, financial trouble inspired labor to swap wage cuts for equity. It looks like that trend might continue at United and American. But Durham worries that rising earnings could undermine labor cooperation. Indeed, after hearing about American's profits, the Association of Professional Flight Attendants repeated its intent to win "industry-leading" wages in current contract negotiations.

To be sure, there are some bright spots on the horizon. The industry will get some help from Washington, though not much. President Clinton's Commission to Ensure a Strong & Competitive Airline Industry has just released preliminary recommendations that urge Congress to lower the airline-ticket tax from 10% to 8%, a move that would net the industry up to $1 billion annually and to exempt the airlines from any new gasoline tax. Northwest Airlines Inc. Chief Executive John H. Dasburg also figures that a recovering economy will lead to an increase in air travel and "the industry will become profitable."

But few believe this will offset the need for more restructuring. "This industry still needs to make fundamental changes," warns former Federal Aviation Administration General Counsel Kenneth Quinn. The industry's big fear is that euphoria generated by its paltry profits may undermine the will needed to make that happen.

By Kevin Kelly in Chicago, with Seth Payne in Washington

Busy pipelines: OPEC rebels are pumping 750,000 barrels a day over their allocation

A BARREL OF TROUBLES FOR THE OIL MARKET

raqi exports and OPEC quota-busters could push prices even lower

For three years, oil traders around the world have dreaded the overthrow of Iraqi dictator Saddam Iussein. His ouster would likely put an nd to the embargo slapped on exports f Iraqi oil following the invasion of Kuvait. And if huge quantities started hitng already flooded international marets, the price of crude would collapse.

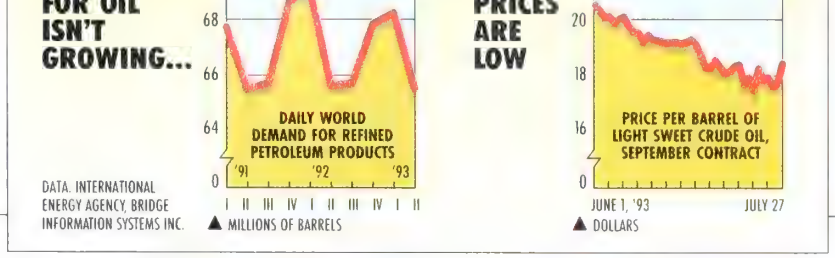
Saddam is hanging in there. But Iraq nd the U. N. are engaged in on-again-ff-again talks to forge an agreement hat would permit Baghdad to sell limitd amounts of oil. Small wonder oil rices are skirting their lowest levels ince July, 1990: Before ticking up lightly as July drew to its close, crude lipped below $16 a barrel, down 25% rom two months before (chart).

UOTA BUSTERS. Even with that very baic motivation, though, OPEC once again as abandoned its pretense of unity. Iembers scheduled, then days later caneled, an emergency meeting in late July o hammer out a new production accord hat would keep oil rices from dropping urther.

The oil exporters kely won't meet again ntil September. They vill have plenty to disuss. Kuwait, Nigeria, nd Iran have been umping far in excess f their allotted quotas, leaving OPEC at least 750,000 bbl. a day over its self-imposed output ceiling this quarter of 23.6 million bbl. a day. "The Iranians and the Kuwaitis are totally responsible for problems in the market," says a top Saudi official in Riyadh.

It will be an uphill battle to rein in the quota-busters. Saudi Arabia, OPEC's biggest producer at 8 million bbl. a day, is adamant about not cutting its output to make room for Iraqi exports—especially if traditional rivals like Iran continue to cheat. The standoff between Riyadh and Tehran means the downhill slide in oil prices is unlikely to be braked for long.

Energy markets are in a bearish mood even without OPEC's bickering. With a recession working its way through Europe and a sluggish recovery in the U. S., consumers simply aren't flooring the gas pedals. In a drastic downward revision, the Paris-based International Energy Agency now estimates world oil demand will rise this year by only a minute 100,000 bbl. a day.



Can this tenuous market handle a sudden gush of oil from Iraq? Not likely. With 115 billion bbl. in proven crude-oil reserves, Iraq is one of the richest patches on the planet. Until the gulf war interrupted it, Iraq's output of 3 million bbl. a day made it the largest exporter in OPEC after Saudi Arabia.

In late June, Iraqi Deputy Prime Minister Tariq Aziz met quietly in Geneva with U. N. Secretary General Boutros Boutros-Ghali to discuss the issue of a one-time sale of $1.6 billion worth of Iraqi oil—550,000 bbl. a day for six months—to pay for humanitarian supplies. Iraqi and U. N. negotiators held intense talks in New York before Iraq's chief legal official, Riyadh Al-Qaysi, returned to Bagdhad on July 12. U. N. officials now say they don't know when talks will restart.

Watching eagerly on the sidelines are some of the world's biggest oil companies. Since last year, Iraq has been quietly negotiating with France's Elf Aquitaine and Total-CFP and Italy's AGIP, among others, about potentially juicy oil production deals, the companies confirm. American producers say they're not involved in such talks.

NO COMMON GROUND. Iraq is offering the oil companies production-sharing agreements in exchange for help with getting huge southern Iraqi oil fields on stream once U. N. sanctions are lifted. Western nations likely won't lift their embargo anytime soon, until Saddam capitulates fully to the U. N.'s demands for limiting chemical and nuclear weapons. But that hasn't precluded exploratory discussions. "We've been talking with the Iraqis about possible agreements and are evaluating what they are offering," says AGIP Chairman Guglielmo Moscato. "But so far, we haven't found common ground."

Baghdad is now shipping 60,000 bbl. a day through Jordan and smuggling an additional 40,000 through Iran and Turkey, say Middle Eastern oil sources. But Iraq will need to turn to Western companies for technology, financing, and markets once it can export on a large scale.

In the near term, too, Iraq needs stability. Three years of trade sanctions have shattered the nation's economy: Galloping inflation and inadequate supplies of food and water are straining Iraqi society to its limits. A return to production by yearend, which OPEC officials now expect, will be good news for 17 million hard-pressed Iraqis. It will spell continued tumult, though, in the oil markets.

By John Rossant in Rome, with Ruth Pearson in New York

PHOTOGRAPH BY ROLLE/REA/SABA CHART BY RAY VELA BW

SOCIAL ISSUES

SURE, 'UNPAID LEAVE' SOUNDS SIMPLE, BUT...

The Family & Medical Leave Act may give employers a headache

When Joseph Clague asked for a leave after the birth of his second child, he says his boss at Portland General Electric Co. "just laughed." Two and a half years later, in March, 1988, the service inspector was expecting his third kid and asked again. By that time, Oregon had a law granting up to 12 weeks of unpaid parental leave to employees in companies with more than 25 workers. Clague wanted 10 weeks off. But instead of forgoing his paycheck, he wanted to substitute two weeks of paid vacation, three floating holidays, and 7½ weeks of accrued sick leave for the unpaid time. PGE agreed to the leave and the vacation time, but nixed the sick days because Clague "wasn't sick," says John R. Faust, a lawyer for PGE.

Clague took the 10-week leave anyway, depleting his savings and going into debt. But that's not all: He also complained to the state Bureau of Labor & Industries. The agency ruled that employees may indeed use accrued sick leave as parental leave and awarded Clague $7,862 in back sick pay and damages. PGE appealed, and the case is now pending before the Oregon Supreme Court. Parental leave, says Clague, "becomes just a luxury of middle- and upper-level people if you aren't able to use your paid leave." Says Faust: "Substituting paid time for unpaid leave adds a cost that the law didn't intend."

TEST CASES. Is the nation ready for the federal Family & Medical Leave Act (FMLA)? When the law takes effect on Aug. 5, mandating unpaid leave for child care and other family and personal needs, employers and workers will have to resolve contentious issues similar to those PGE is still dealing with. Can employees substitute accrued sick days for unpaid leave? Just what constitutes an "equivalent" job when a leavetaker returns and his or her own job is taken? What sort of employee illnesses are "serious" enough to justify a leave? "It's more complicated than people would think," says LeAnna Ware, bureau director of the Equal Rights Div. at the Wisconsin Industry, Labor & Human Relations Dept.

Corporate America isn't starting from scratch: There are already some test cases from the 35 or so states that now grant parental, family, or medical leave to employees. The federal law tracks many of the states' requirements; where they conflict, the FMLA lets employees pick the most generous provisions between state and federal laws.

But that won't make implementation any easier. Figuring out which law applies will be difficult enough. And the complaints brought under state laws represent complex human-resources issues that defy simple solutions. "It's not until you start factoring all these things together that you get a big headache for employers," says Carol Sladek, a benefits consultant with Hewitt Associates in Lincolnshire, Ill.

Compared to the state laws, which many workers remain unaware of, the FMLA has less of a recognition problem. Twice vetoed by President Bush, it provides up to 12 weeks of unpaid leave for a child's birth, adoption, or foster-care arrival. Leaves may also be taken to care for a spouse, parent, or chi with a "serious health condition," when an employee is too sick to work

The law applies to employees wh have worked an average of 25 hours week in the past 12 months for the san company and to employers with 50 more employees. Employers must pr vide health benefits during the leave an must give returning employees their p or job or an equivalent one in terms salary and other conditions.

UNEQUIVALENCE. A Wisconsin suit poin out just how tough such a requireme can be for employers. After Elizabe Marquardt returned from materni leave on Dec. 12, 1988, she discover that her Milwaukee-based employer, K ley Co., had eliminated her job as cre manager during a restructuring. Ma quardt's new job involved supervisi one employee instead of four worke and, unlike the old position, includ about 25% clerical work. She resign the next day.

Kelley says that the reassignme was intended to sidestep Marquardt long-standing communication problen with customers. But even though th new job went with the same pay, th same benefits, and the same office before, a Wisconsin appeals court rul that the jobs were not equivalent b cause Marquardt's "authority and r

ısibility were greatly reduced in the position." The court ordered a hear- to determine back pay, and the par- settled recently for an undisclosed ount.

ı anticipation of the FMLA, large em- ers are adapting existing policies to new rules. Companies that already rate in states with similar laws, such Prudential Insurance Co., say that the transition will be straightforward.

The FMLA will mean big changes, though, for smaller companies such as 300-employee Pacer Systems Inc. in Billerica, Mass. It had offered up to six months' leave, but only to employees who themselves fell sick or gave birth. "For us, the big difference will be having to give job protection and benefits to people who are not sick," says Roberta Steinberg, vice-president of human resources. Still, Steinberg says the most expensive part of the new law will be the time she has had to pour into preparation. For employees such as Joe Clague in Oregon, such efforts are worth it: They get to spend time with their families when it matters most.

By Michele Galen in New York, with bureau reports

LTH CARE

HEALTH-CARE WINNER HAT MAY GET ZAPPED

nton's reform plan could kill corporate wellness programs

ave Denby is a wellness convert. The 50-year-old systems manager at Travelers Corp. sees his doctor ot less often since he lowered his od pressure with workouts at the npany's Hartford (Conn.) fitness cen- . And he no longer rushes his daugh- Sarah to the doctor every time she s a cough: Health tips from the Trav- rs facility convinced him and his wife ıt the 11-year-old's routine coughs uld clear up on their own. "Before," nby says, "we didn't ve confidence in our n knowledge."

The Denbys are althier than they ed to be. But the big- st winner may be avelers. An indepen- nt evaluation of its king Care Program, blished in the *Jour- ıl of Medicine*, found at Travelers reaped .40 in savings for ev- y $1 spent on the pro- am, thanks to in- eased productivity ıd lower medical and ıseenteeism costs. The surer's net savings: .8 million in 1992.

Such results are be- ming common as ore companies adopt ellness plans, which offer employees verything from fitness centers and dis- ase screening to smoking and alcohol- m control. Indeed, a team of research- rs finds in the July 29 issue of the *New ngland Journal of Medicine* that the est of 200 corporate wellness programs ut medical claims by up to 20%. If such demand reduction" could be extended all Americans, the researchers argue, ne nation could cut $180 billion from its loated health-care bill.

But wellness plans face a threat from an unexpected source: health-care reform. Hillary Rodham Clinton stresses the need for a medical overhaul that promotes good health. But the Administration's plan, scheduled for release in mid-September, could wipe out employers' incentives to promote wellness.

The threat stems from the White House's plan to pay for health-care reform. As it stands now, it would replace employers' current negotiated health-insurance premiums with either a payroll tax or a flat premium that would be the same for every person in a state or region. Either scheme would eliminate any connection between a company's payments and its employees' medical bills—and any advantage for a company that invests heavily in prevention. "If we're lumped with everyone else, there's no rationale for us to take care of our employees," says Max L. Morton, manager of wellness service for Coors Brewing Co. in Golden, Colo., which nevertheless has no plans to shutter its center.

An ounce of prevention: Fitness centers more than pay for themselves by slashing insurance payouts

JOA GUERNSEY BLACK STAR

White House officials maintain that their plan will reward health promotion, not impede it. Insurers will have to cover basic preventive services, such as screening tests, vaccinations, and checkups. And Ira C. Magaziner, staff chief for the Administration's health-reform task force, argues that the networks of doctors and hospitals that deliver care will be required to promote wellness among their customers. Health plans, which will receive flat annual fees for each person they cover, will have financial incentives to keep customers healthy, reform advocates say.

MISSED OPPORTUNITY. But screening tests and checkups are among the least effective ways of cutting health costs. And wellness advocates say the workplace is often the best site to reach people with health education and fitness plans. "Think of how often you go to the doctor versus being at your office every day," says William B. Baun, manager of health promotion for Tenneco Inc. Employers say they're better suited to provide integrated health promotion, covering everything from nutritional choices in the cafeteria to educational literature for workers' children.

Business hates the potential cost of the health plan, regardless of its effect on wellness programs. But beyond self-interest, business and its allies think the government may be missing a chance to control costs. "The secret to demand reduction is to give the incentives to the people who can reap the savings—and that's employers and insurers," says Dr. James F. Fries, the Stanford University School of Medicine professor who wrote the *New England Journal* article. But that approach requires putting faith in the market's ability to bring down medical spending—a faith that so far has eluded the Clinton team.

By Mike McNamee in Washington, with Chris Roush in New Haven, Sandra D. Atchison in Denver, and bureau reports

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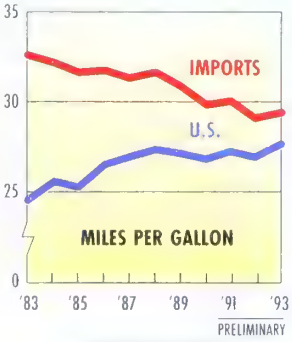
In Business This Week

EDITED BY KEITH H. HAMMONDS

NARROWING ANOTHER GAP

Autos made by U.S. manufacturers haven't improved their use of fuel substantially since 1988—though as a group, they now exceed the federal standard of 27.5 miles per gallon. Meanwhile, Japanese makers have introduced bigger guzzlers. Below, the sales-weighted average fuel mileage for new domestic and imported cars sold in the U.S.:



DATA TRANSPORTATION DEPT

A BLOW TO BIG STEEL'S RECOVERY

▶ Big Steel was ready to whoop it up, but the U. S. International Trade Commission canceled the bash. On July 27, the ITC ruled that U. S. steelmakers had not been injured by many imports, and lifted about half of the tariffs applied two months earlier by the Commerce Dept.

Steel executives called the decision "mixed." But Wall Street saw nothing mixed about it. Leading steel stocks plummeted, with National Steel dropping 27% to 14⅞, on the news. The ITC tariffs were key to Big Steel's survival strategy. With protection against imports, the companies had figured to raise depressed steel prices by 15% to 20% a year, creating a profit for 1993 after three years of big losses. The companies hoped a profitable year would persuade Wall Street to underwrite major capital investments.

Meanwhile, the rulings almost certainly will bolster the tottering Uruguay Round of global trade negotiations. Sir Leon Brittan, the European Commission vice-president for external economic affairs, applauded the ITC for defusing "what had become a very grave trade dispute." But momentary world accord may have its price: For now, forget about healthy steel profits.

TRANSATLANTIC DRUGMAKERS TEAM UP

▶ The battle among drug companies for over-the-counter shelf space is heating up. On July 28, British drugmakers Glaxo Holdings and Wellcome announced separate plans to team up with Warner-Lambert. Glaxo and Warner-Lambert plan to form a joint venture aimed at developing and marketing a version of Glaxo's $3.2 billion ulcer drug, Zantac. Wellcome and Warner-Lambert have established a partnership that will do the same for a version of Wellcome's $1 billion antiviral medication, Zovirax.

The British companies are hoping that Warner-Lambert's marketing muscle can help stave off share erosion as patent expiration—and generic competition—loom for Zovirax and Zantac.

News on Wellcome's AIDS drug, AZT: A North Carolina court recently upheld the company's exclusive patent rights, effectively barring two U. S. rivals from selling generic clones.

WEDDING FROM HELL? BREATHE EASY

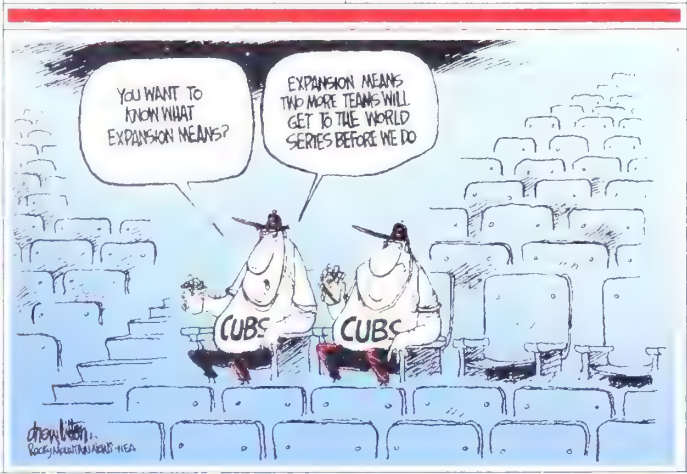
It's the morning of your wedding. The limo is due in two hours. And your dress . . . well, your dress is covered with fingerpaint, since your nephew decided white was boring. Before you feed him to the rottweiler, remember: You're insured. Fireman's Fund Insurance Co., which pioneered medical insurance for pets, now offers the $129 wedding catastrophe policy.

If the Big Day goes badly, Fireman's will pay up to $3,00 newlyweds' unreimbursable costs. That includes up to $1 for damage to wedding attire—which the company's Bri affiliate paid to a woman whose cat gave birth on the trai her dress. Photographs are covered, too: If the film gets len, the policy pays to reshoot the wedding party. Lousy tures are your problem, however. And so is a change of he If either party gets last-minute cold feet, Fireman's F doesn't pay. Says a spokesman: "We can't underwrite lov

RED INK AT TANDEM, REVIVED SALES AT DEC

▶ IBM's huge second-quarter loss wasn't the only red ink spilled lately by the depressed computer industry. Tandem Computers posted a $550 million loss for its third quarter, thanks to a massive restructuring that will slash some 15% of Tandem's work force. But Digital Equipment proved a surprise. The minicomputer maker reported operating profits of $120 mil for the quarter ended Jul a function of hard-nosed c cutting and a strong per mance from DEC's sa team.

A lot of the credit goes the new guy in sales: Edw Lucente, late of Northern lecom. Lucente has pus for greater autonomy for organization and is mov DEC into new distribut channels, including retail. not yet a turnaround, but better than DEC investors used to.



A McGRAW MOVES UP AT McGRAW-HILL

▶ McGraw-Hill returned its roots on July 28, nam Harold W. McGraw III pr dent and chief operating c cer. Joseph L. Dionne, had been president, rema chairman and CEO of the c pany, whose holdings incl BUSINESS WEEK and Stand & Poor's.

McGraw, 44, is a gr grandson of founder Ja H. McGraw. He joined company in 1980 and rose supervise all of its operati in '92. McGraw says he'll cus on alliances and part ships, and emerging mark such as Chile and Mexico

EDITED BY STEPHEN H. WILDSTROM

'OUNG AMERICA'S RALLYING CRY: DIS THE DEFICIT'

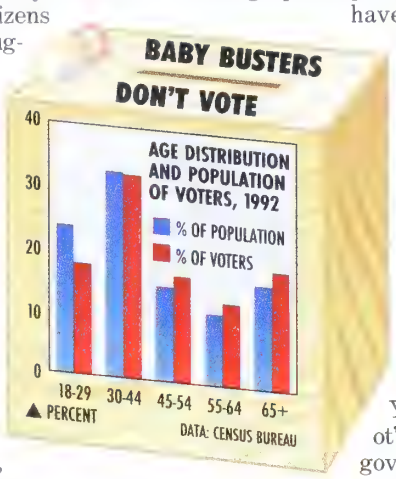
hane F. Harris is disappointed. It's not just that the 24-year-old Howard University graduate is working in a watch store while looking for the banking job he really nts. The budget deficit bugs Harris—a lot. Because Clinton's n will still add $1 trillion to the deficit over the next four ars, he laments: "It's not helping our generation at all."

Harris and other twentysomethings are unimpressed by ficit-cutting efforts that only nip at Social Security and ıer expensive benefit programs for the elderly. Overshad-ed by the politically powerful senior citizens d baby boomers, the baby busters are strug-ng to make their voices heard. And they the deficit as the most potent symbol generational neglect.

E PLEDGE. As Congress put the final touch-on the 1994 budget on July 14, a delega-n of 500 busters dumped 4,000 pennies—nbolizing the $4 trillion national debt—on Capitol steps in a "Dis the Deficit" otest. But that was small change com-red with the 1994 plans of Lead or Leave, year-old grass-roots lobby that pressures iticians to pledge to cut the deficit in half four years or quit. Next up: a national ed-ation campaign, chaired by Senator Bill adley (D-N. J.). It will feature university ıch-ins; workbooks for high school math, tory, and civics students; and interactive software to let stu-nts fashion their own budgets.

No youth movement would be complete without a concert: leed, Hal Uplinger, whose Live Aid production raised mon-for African famine relief, is organizing a February "Rock Deficit" benefit for the national debt. Then, in April, the oup plans a Washington "Youth to Power" rally and confer-ce to identify the issues bugging Generation X: the deficit, failing educational system, polluted air and water, and me. Says Lead or Leave's Jon Cowan, 30: "The deficit is the licalizing edge issue, but it's only part of the web of issues destroying the future of our generation." Cowan and fellow Lead or Leave co-founder Rob Nelson also helped write the *Third Millennium Declaration*. This manifesto, which covers everything from government waste to deadbeat dads, has already been circulated on Capitol Hill and will be distributed on college campuses this fall.

Of course, none of this matters unless it translates into clout at the polls, and that's where the busters have fallen short. Although participation by young voters rose in 1992, they still have the lowest turnout of any age group (chart). Lead or Leave hopes to reverse this by targeting a half-dozen 1994 House campaigns to demonstrate youth power through get-out-the-vote efforts. Analysts are skeptical. "Young voters rarely have the cohesion or the interest to become a political force," says William Schneider of the American Enterprise Institute.



At best, the relatively small Generation X will have a tough time displacing the baby boomers' emerging dominance in politics and popular culture. The busters, says Schneider, "could start a movement, but it's going to look very much like Youth for Perot. The deficit is already Perot's symbol of corruption and incompetence in government economic policy."

Furthermore, a dose of economic growth could ease Generation X's alienation. Once corporations resume hiring, the busters may forget the deficit and start thinking like the boomers. If not, busters may look for salvation in politics. The key is "building attitudinal bridges across generational lines," notes Martha Farnsworth Riche of the Population Reference Bureau, a demographic think tank. "They'll have to have allies." And to make a difference, such groups as Lead or Leave will have to show that they can do as well at politics as in organizing benefit concerts and rallies.

By Paul Magnusson

APITAL WRAPUP

EGAL DEFENSE

he high cost of defending himself is one thing that House Ways & leans Committee Chairman Dan Ros-enkowski (D-Ill.) probably won't have worry about if he's indicted for his lleged role in the House Post Office candal. Rosty has hired a high-pow-red—and expensive—legal team head-d by criminal defense specialist Rob-rt Bennett. So far, an aide says, he as spent about $500,000, and a trial ould cost several times that much.

But federal law gives Rostenkowski variety of means to defray his legal efense. Although new campaign con-ributions may be off-limits, a 1977 Federal Election Commission ruling al-lows the Ways & Means chieftain to use funds left over from previous elec-tions. Rostenkowski ended 1992 with a hefty $1.2 million on hand. If he runs through that, he can ask the House ethics committee to let him set up a le-gal defense fund—and he would prob-ably have little trouble raising money from the interests that lobby his com-mittee. Supporters, including unions and corporations that can't make di-rect campaign contributions, could chip in up to $5,000 apiece. And the gifts need not be disclosed until next May. So far, Rosty hasn't moved to establish a fund. But, says an associate: "Never say never."

CABLE TV

Lawmakers never thought they would end up the principal victims of a 1992 law that requires cable-TV systems to carry local broadcast sta-tions. To make room for local program-ming, a number of systems, especially smaller ones with limited channel ca-pacity, have pulled the plug on C-SPAN, which covers Congress. Officials of the public-affairs network say that 936,000 cable viewers have lost access to gavel-to-gavel coverage of Congress. C-SPAN itself and a legion of C-SPAN junkies are mounting a legal challenge to over-turn the "must carry" legislation and give them back their favorite channels.

U.S. HOUSE BRAIMAR/BW

PURE PANDEMONIUM: MOSCOW CASHIERS WERE SWAMPED WHEN PRE-'92 BILLS WERE WITHDRAWN

SUDDEN, STEALTHY —AND CRAZY

RUSSIA'S BOTCHED RUBLE CALL-IN RAISES THE ISSUE ANEW: WHO'S IN CHARGE?

Boris Yeltsin had earned a vacation. His victory in the April referendum and the progress on a new constitution had put his anti-reform opponents on the defensive. After a long, humiliating slide, the ruble had strengthened, and the battered economy appeared to have reached bottom. At the economic summit in Tokyo, Yeltsin won a commitment of $3 billion in Western privatization aid. Hoping that Russia had achieved a measure of stability, Yeltsin went off in mid-July to a lakeside dacha near Novogorod.

That proved to be a big mistake. While Yeltsin was relaxing, his enemies in Moscow launched a major counterattack. The conservative-dominated Parliament passed laws to slow privatization, bail out communist-era industrial dinosaurs, and ban foreign banks from serving Russian customers. But the crowning blow came on the soggy Saturday morning of July 24: The Russian Central Bank proclaimed that all bank notes issued from 1961 to 1992, at least 20% of the cash in circulation, would no longer be valid. Terms of exchange were tough: Russians had only two weeks to switch a limit of 35,000 old rubles ($35) for new ones, with the rest frozen in low-interest savings accounts.

The result? Pure pandemonium. F Volgograd to Vladivostok, frighte Russians went on buying binges, s ping up everything from outdated c of food to live rabbits. On Monday m ing, they began lining up in an queues at savings banks, trying to tr in old bills for new ones. Many of banks hadn't even been supplied w new cash. For inflation-weary citiz the move smacked of old-time com nist *diktat*, not the enlightened popul they had come to expect from Yelts government.

While President Clinton showed signs of wavering in his determined s

AP WIDE WORLD

rt of Yeltsin, the increasingly open ırfare over policy could jeopardize estern aid flows. Says a senior West- ı financial official in Moscow: "It is other sign that the authorities of Rus- ; cannot be trusted."

The botched ruble policy even calls ;o serious question Yeltsin's ability to ntrol his government. Prime Minister ktor Chernomyrdin backed the ruble ›ve, along with Central Bank Chief ktor Geraschenko. Yet the decision ıs made without informing Boris Fyo- rov, the Finance Minister who is Yelt- ı's point man on economic reforms. hat Yeltsin knew of the policy before- nd remains unclear.

Both Yeltsin and Fyo- rov hurried back to ›scow, and Yeltsin soft- ed the terms of the rrency callback—up- ıg the limit to 100,000 bles and extending the ıde-in period until the d of August. But by en, the damage was ne. Geraschenko, ıose free-spending ıys have jeopardized ›nomic recovery in the st, quickly took Yeltsin task, claiming that in neral terms the Presi- nt had known all along out the forthcoming ble switch.

No matter who was nspiring against whom, e fallout is destroying e sense that Russia's ›nomy was finally sta- izing. Erratic leader- ip, combined with ex- cted higher prices for el and grain in the fall, e likely to send the ru- e tumbling again. Also, newed combat between lustrialists and reform- s in Yeltsin's govern- ent will make it harder push the tight money eded to stifle hyper- flation and to lead toward recovery.

ALLYING CRY. Yeltsin's appearance of ındering gives his enemies a big politi- l opening. Parliamentary Chief Ruslan Khasbulatov, Yeltsin's main antago- st, is using the ruble brouhaha as a llying cry against incompetence in the vernment. He is expected to unveil his ›n constitution this week, which will ıdoubtedly maintain the old commu- st-era legislature. That will be in sharp ntrast with Yeltsin's version, which ›uld try to sweep away conservative gislators by holding new elections this ll or next spring.

Also hovering in the wings is Arkady Volsky, the former Communist Central Committee member who is leader of Civic Union, an influential centrist group of Russian industrial managers. On July 23, Volsky announced that a new political party, called Renewal, would take the field this fall. Among its goals: slowing privatization to give former Communist apparatchiks more control.

Geraschenko claims his drastic move was aimed at curbing 15%-a-month inflation. While calling in old bills is technically an anti-inflationary step, it does nothing to address the much more important causes of inflation: huge budget deficits and noncash credits used to prop up flagging industries. Indeed, conservative forces in the Parliament recently pushed through a highly inflationary budget for 1994. It calls for a deficit of 25 trillion rubles, or about 30% of gross national product. The state industries continue to be the biggest drain. Yeltsin, who will probably try to reject Parliament's budget, wanted a deficit of only about 12 trillion rubles.

The Central Bank claims the abrupt call-in was needed to foil counterfeiting and to begin to get rid of old bills bearing likenesses of Lenin and other discredited heroes. The bank also said it was trying to prevent old rubles still circulating in other former Soviet republics from flowing back into Russia and fueling inflation.

But economists discount the seriousness of this ruble threat. While small republics such as Georgia and Armenia are still using the ruble, Ukraine, the second-largest, has largely replaced the Russian currency with a temporary Ukrainian version, the karbovanetz. The Baltics have also ditched the ruble.

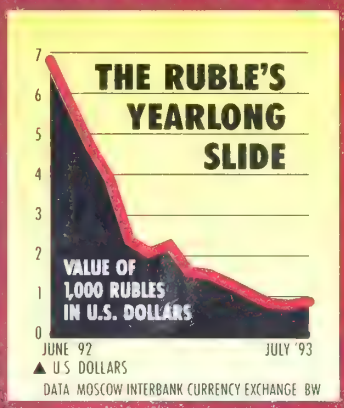
"VIOLENT ACTION." It is almost as if the architects of the ruble callback designed it to create maximum political damage inside Russia and in relations with former Soviet republics. Ukrainian officials, for example, are irritated at the Central Bank's taking such a step without informing them—even though just two weeks before, the three Slavic countries of Russia, Ukraine, and Belarus had tentatively agreed to form a new economic union. Russia's move, says Vitaly Tykhy, head of the Donetsk branch of the Ukrainian National Bank, is "an unfriendly and violent action."

Typical Russians, meanwhile, have nothing but contempt for the mayhem. The ruble ruling, at least for a couple of days, meant that Muscovites were hard-pressed to take buses or subways, because all small bills were invalidated. Many travelers were stranded. On July 26, Sergei Ivanchenko, a welder from Norlisk, a Siberian town above the arctic circle, fumed as he waited in line at a savings bank near Moscow's Kiev Railway Station to exchange money. Stuck in the capital by the ruble fiasco, he curses the Central Bank chief: "I'd like to see Geraschenko with both of his hands cut off right now."

Indeed, calls for Geraschenko's resignation are growing louder in the Supreme Soviet and in Yeltsin's government. Finance Minister Fyodorov joined the chorus, telling reporters on July 28 that the ruble move, "a stupid act," was "against the President, against the leadership, and against Russia." For Yeltsin, the only good that may come of the debacle might just be Geraschenko's resignation—and a much better understanding of what central banking is all about.

By Peter Galuszka in Moscow, with Roma Ignatowycz in Kiev

CROSSED SIGNALS: PRIME MINISTER CHERNOMYRDIN (ABOVE LEFT) BACKED THE CALL-IN WITHOUT TELLING FINANCE MINISTER FYODOROV (RIGHT). YELTSIN QUICKLY SOFTENED THE POLICY



(CLOCKWISE FROM BOTTOM LEFT) PHOTOGRAPHS BY JEFFREY MARKOWITZ-SYGMA; DE KEERLE-CROCHET/VIVA-SYGMA; ITAR-TASS/SOVFOTO. CHART BY ERIC HOFFMANN/BW

CURRENCY

THE GLOBAL GREENBACK

"Dollarization" is bucking up economies worldwide

In Ho Chi Minh City, the proprietor of a nightclub demands a $4 cover charge—in U. S. currency, please. In São Paulo, the Sunday classified ads quote dollar prices for everything from a broom factory (for just $25,000 down) to "beautiful blondes and brunettes" at $100 for a few hours of bliss. Want a shiny new Zhiguli sedan? In Moscow, you can drive one home for $5,000 in American cash.

The new world economic order is upon us—and it's awash in greenbacks (chart, page 44). Never before have so many foreigners used dollars for so many purposes, from stabilizing economies to selling soap. "In the last three years, we've had an unprecedented increase in dollars, and the lion's share appears to be going abroad," says Federal Reserve Board currency expert Richard D. Porter. The Fed estimates that nearly two-thirds of the $300 billion of U. S. currency in circulation has gone abroad. That's up 14% in just two years, and triple t amount in use overseas a decade ago

The skyrocketing demand for dolla is being generated by the search for e nomic stability that extends from communist economies to the inflati wracked nations of South America. Ev Fidel Castro recently legalized the u of dollars, the ultimate symbol of *Yo qui* imperialism, in a desperate bid prop up the crumbling Cuban econom

The growing use of the dollar is testament to confidence in the U. S. spite the greenback's 40% fall agai other major currencies since 1985. In fect, most of the world is betting th the U. S. will preserve the value of currency against further depreciation keeping inflation in check. One U. bank is shipping ever-growing piles greenbacks to Argentina, Russia, Chi Indonesia, the former Yugoslavian publics, and the Persian Gulf, whe construction workers are paid in dolla "It's a surprise how little comes bacl says a bank executive.

HIDDEN SAVINGS. The dollars flowi into Latin America are helping tame h perinflation. In April, 1991, as part o stringent anti-inflation policy, Argenti pegged its currency at parity with t

BUYING BATTERED BILLS IN LIMA: U.S. CURRENCY IS HELPING TO COOL HYPERINFLATION THROUGHOUT LATIN AMERICA

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dollar. It now prints no more pesos than it can back up with dollars, gold, or other convertible reserves. Since the new policy began, Argentina's annual inflation rate has plummeted from 84% to 12%. Brazil, where an inflation rate of 1% a day has made the cruzeiro nearly worthless, is considering a similar move.

Although black-market dollar purchases are technically illegal, middle-class Brazilians keep stashes of dollars in U.S. banks or hidden at home. The exchange rate—now around 70,000 cruzeiros to the dollar—is splashed across the pages of daily newspapers. In Bolivia, meanwhile, where half of all bank accounts are denominated in dollars, the greenback is a shadow currency. Bolivians mentally price everything in dollars, then reconvert into bolivianos.

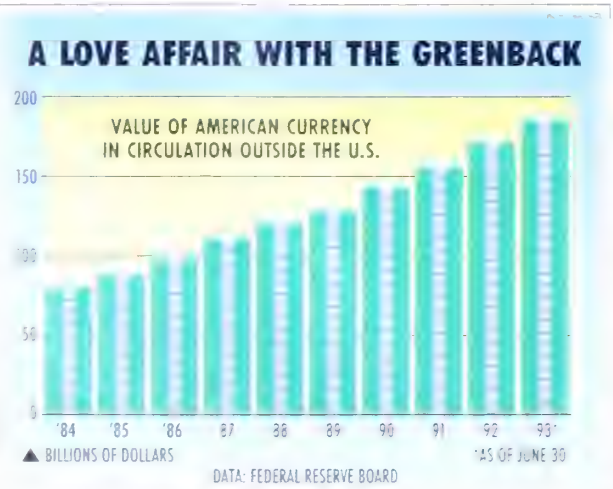
Exactly how did all those dollars get abroad? U.S. officials aren't sure, since there's virtually no tracking of currency leaving America. Only cash transfers of $10,000 or more need be reported. Officials assume that dollars are sent home by U.S. relatives, spent by American tourists, and acquired by businesses selling raw materials and other goods for cash. And, of course, there's illicit money laundering. "It's so easy, it's pathetic," complains a House investigator. "Put a wad of hundred-dollar bills in an overnight pouch, and it's done. Nobody looks."

BENCHMARK. Using dollars to stabilize an economy is not a new idea. Panama and Liberia long ago made the dollar their official currencies, while Hong Kong and Honduras have pegged their money to the dollar. What is new is how eagerly countries that once were bitter ideological foes of the U.S. are grabbing up the greenback.

For these former communist systems, the availability of dollars provides a benchmark of value. In the main shopping districts of Beijing and Shanghai, Chinese consumers trade their renminbi for dollars piled under tables. In Vietnam, despite tight trade sanctions, U.S. currency floating around since American troops left and remittances from family members in the U.S. have allowed the Vietnamese to build a dollar economy. Some $600 million in dollars is believed to be in circulation.

With hyperinflation pushing the exchange rate of the Vietnamese dong above 10,000 to the dollar, greenbacks are essential for buying cars, computers, and other expensive goods. It would take a wheelbarrow of dong to buy the same items. "Without dollars, there would be no way for us to settle big transactions," says Huynh Buu Son, deputy director-general of the Saigon Bank for Industry & Trade. When foreigners rent villas in Hanoi, they are asked to put down three years' rent in advance—in dollars.

RENOVATING A HANOI VILLA: THREE-YEAR RENTALS ARE PAYABLE IN ADVANCE—IN DOLLARS



in circulation in Russia, but e mates range up to $20 billi The ruble had stabilized recen at about 1,000 to the dollar. B when Russia's central bank, July 24, called in all rubles pri ed before 1993 (page 38), that off a stampede for Americ cash. "We're not selling a more dollars," exclaimed a wo an counting bills at a Mosc currency stand. "It's been a m house."

Indeed, with many Russia paid partly in greenbacks, th can now take advantage of osks bedecked with large sto of Snickers and Mars candy ba Marlboro cigarettes, Jim Be bourbon, and Coke and Spri Says one Western diplomat: "T dollar is unbeatable."

DOLLAR DIET. The dollar reig supreme in emerging markets cause it's still the only curre instantly recognized around t globe. True, in the industr world, the dollar has been stea ly losing ground to the Germ mark and Japanese yen, and now comprises only half of o cial foreign exchange reserves

But partly for historical r sons, former Soviet econom are reluctant to embrace the G man currency, and Japan's central ba doesn't encourage expanding the yen an international transaction curren That helps explain why since the fall communism in 1989, developing co tries have raised their dollar reser from 58% to more than 65% of their to holdings.

There's not much immediate risk the U.S. in satisfying the world's ne for dollars. Cash accounts for less th 9% of the U.S. money supply. And si the Fed is no longer targeting mon growth anyway, officials aren't c cerned about the inflationary i pact of the greenback surge.

To the contrary, the dollar's ternational spread increas pressure on the U.S. to purs price stability at home. Fed o cials acknowledge that part the responsibility of having t preeminent world currency preserving its value. By allowi the emerging world to emba on a dollar diet, Washington m also have more incentive to sh a little discipline at home.

By Owen Ullmann in Wa ington, with Pete Engardio in Chi Minh City, Peter Galuszka Moscow, and Bill Hinchberger

EDITED BY STANLEY REED

TALY'S 'VELVET REVOLUTION' S TURNING UGLY

ver since a two-bit political hack in Milan was caught trying to flush $4,400 in bribe money down his toilet 18 months ago, Italians have been loudly cheering the coun- 's sweeping anticorruption campaign. Italy's "velvet revolu- n" seemed to promise a smooth transition from an en- nched and corrupt system to a clean, transparent mocracy.

But the euphoria is turning to confusion and trauma. Many lians took the suicides of two of their most important busi- s figures in late July to mean the process may be out of ntrol and becoming ugly. First came the shocking death of year-old Gabriele Cagliari, for- r chairman of the huge, state- ned energy combine ENI. He was nd in his jail cell with a plastic g over his head on July 20. Then, hours later, Raul Gardini, 60, ly's top financial wizard of the 80s, blew his brains out in his th century mansion in Milan.

GARDINI'S FUNERAL: THE NATIONAL TRAUMA DEEPENS

The growing sense of unease was ightened by the three car bombs at rocked Rome and Milan on ly 28, killing five people and bad- damaging deeply prized historic monuments. While it is un- ear who was responsible for these explosions and for bomb- gs earlier this year, they are seen as a violent protest ainst the investigations. Throughout Europe, they are also ewed as warning signals that Italy could return to the dark ys of terrorism of the 1970s.

RIBESVILLE." Italians are now wondering out loud whether e country can take much more of this national psychodrama. t the agony is likely to continue for many more months—if t years—as the complex political and economic upheaval ggered by the investigations rumbles ahead.

Prosecutors continue to unearth evidence of outrageous rruption. Recently, they hit what could be the mother lode "Tangentopoli," or "Bribesville," as the corruption scandal is known. It involves the abortive 1989 merger of state-owned chemical interests controlled by Cagliari's ENI with units of Gardini's Ferruzzi agro-industrial empire into a company called Enimont. Prosecutors have obtained testimony from an Enimont insider detailing as much as $110 million in bribes when ENI bought out Gardini and the Ferruzzis for a staggering $2.8 billion in 1990.

Similar revelations have already destroyed the careers of hundreds of leading politicians and businessmen and brought about the sharp decline of the Socialists and the Christian Democrats who have governed Italy since 1946. But new political structures and leaders have not yet appeared to fill the vacuum. In fact, parliamentarians, 20% of whom are under investigation, are using their power to block serious reform.

TAX REVOLT. New elections are likely to be held by yearend, but they will not necessarily provide solutions. They could further exacerbate regional and social divisions. The only sure winner will be Umberto Bossi's Northern League. This populist organization has become Italy's largest new political grouping by calling for loosening the prosperous north's ties to the heavily state-supported south. The League's recent calls for an anti-Rome tax revolt are adding to the central government's woes. Property-tax increases of as much as 500% this year are stoking Bossi's appeal—even if many Italians find the League's rhetoric hard to take. "You should all commit suicide," the League's chief ideologue, Gianfranco Miglio, recently sneered at the Italian elite.

The rest of Europe is watching with trepidation as the Italian situation unravels. One witticism often heard in European political circles is that Yugoslavia is the plague outside the borders—while Italy is the cancer within. An exaggeration, perhaps, but finding a cure is going to be long and difficult.

By John Rossant in Rome

LOBAL WRAPUP

IOW LONG FOR THE TORIES?

British Prime Minister John Major in late July won his latest showdown with rebels from his Conservative Party over closer ties with Europe. Despite a legal challenge, British ratification of the Maastricht Treaty on European political and economic union is now in the bag.

But Major's troubles will continue. His party is badly splintered and fresh out of ideas. "We don't really have an agenda," says Alan Duncan, a Conservative MP from the Midlands and a rising star in the party.

Should the Tories dump Major, the eading candidates to replace him would be Chancellor of the Exchequer Kenneth Clarke and Foreign Minister Douglas Hurd. But many experts think the Tories' problems are so serious that they could soon follow the Republican Party in the U. S. and Europe's Socialists into the political wilderness.

The problem is not only Major's Milquetoast personality but also his bad judgment in making stronger ties with the European Community the cornerstone of his agenda. While the Tories wrangled over Maastricht, other issues have become much higher priorities for ordinary British people. These include law and order, education, health care, and unemployment. Major has failed to zero in on any of them. A long recession has caused many new blue-collar Tory converts to desert. Major further alienated such voters with a $15 billion tax increase to help close a $70 billion budget deficit.

About 44% of the voters now say they would choose Labor if elections were held today, while only 34% would vote Conservative. Major's approval ratings are hovering at an abysmal 19%. Worse for Major, an alliance of Labor and the third-party Liberal Democrats could be in the works. Such a grouping would resemble the coalition of disparate Democratic Party elements that Bill Clinton assembled for his 1992 U. S. Presidential victory.

By Paula Dwyer in London

OVITZ

HOW MANY FIELDS CAN THE KING OF HOLLYWOOD CONQUER?

I'm late. Traffic is slithering through Los Angeles like a lazy snake past an accident on Third Street, and drivers fore and aft are hunkered down, brooding. Twenty minutes later, when I finally turn over my car to a valet, I'm also sweating. Great. Lunch with the most powerful man in Hollywood, and I'm late and sweating.

Michael Ovitz, of course, is there already. A solitary figure in a private dining room, he is sitting on the floor, sipping spring water at a low-slung table. We're at Matsuhisa, a traditional Japanese restaurant, and Ovitz has slipped off his shoes and suit jacket. He smiles faintly as I rush into the room and immediately starts to put me at ease. "Gee, you had me worried," he says softly, gesturing for me to sit down. "You look rattled. Take your coat off. Have something to drink."

If ever there was a man whose reputation precedes him, it is Michael S. Ovitz, the sandy-haired chairman of Creative Artists Agency. Superagent. King Ovitz. The Most Powerful Man in Hollywood—choose your moniker.

LYON'S SHARE. While Ovitz, at 47, is surely all of those things, you'd never know it just talking to him. The first impression is that he would like nothing better than to be talking to you. Ovitz exercises power like a Zen brush painter: delicate, deliberate strokes. His earnest concern for what concerns you can be completely disarming. "He just seems to be able to see to the center of a problem and know exactly what you need," says a former CAA employee. Echoes Revlon Inc. Chairman Ronald O. Perelman: "You end up feeling very good that he took the time out to call. It seems like he really cares."

For months now, the object of Ovitz' ministrations has been Crédit Lyonnais. In April, the giant French bank called in CAA to help extricate it from a disastrous foray into Hollywood. Among its troubled holdings: the Metro-Goldwyn-Mayer Inc. studio, which had been dragged down by scandal and $1.5 billion in debt. Not surprisingly, Crédit Lyonnais wanted out—as quickly and painlessly as possible. But the bank couldn't find a serious buyer.

Through subtle persuasion, Ovitz talked Crédit Lyonnais into sticking with the studio. His argument? If only MGM's balance sheet and management could revitalized, the studio would again come a lucrative supplier of movies TV programs. And with digital technology increasing the demand for entertainment, MGM's respectable business could someday become a gusher.

On July 25, Crédit Lyonnais nounced it would redeem or swallow billion worth of MGM debt and give

CAA IS USING ITS TALENT POO

FILM PROJECTS

LUNCH DATES

TRAVEL

BIRTHDAYS

Talent—writers, directors, and actors—is at the core of the Ovitz empire. With just under 1,000 clients, CAA has become America's most ubiquitous broker of popular culture. Now, Ovitz is expanding his power base.

OVITZ AND DIRECTOR SYDNEY POLLACK

MADONNA

ıdio an additional $400 million to rev . its film production. Ovitz also engi- ered the appointment of his longtime end, former Paramount Pictures chief ank G. Mancuso, as MGM chairman. 'e benefit greatly from the valuable unsel of Michael Ovitz," says François lle, the bank's general manager.

Mastering the art of moving people in ; direction has made ritz one of the most posing entrepreneurs the national scene— t just in Hollywood. ıtional, modulated, in- dinately disciplined, he s transformed CAA ɔm a mere talent ency into what may the world's preemi- nt authority on har- ssing star power to mmercial ends. At a ne when Hollywood tertainment is one of nerica's biggest ex- rts—and the great chnological race is on feed the world's homes with new forms of it—Ovitz has virtually cornered the market for raw materials. Nobody has more talent under lock and key. Nobody has more clout.

Now, Ovitz is eagerly eyeing the convergence of entertainment with computers and telecommunications. Where some see hype and confusion, Ovitz sees immense opportunity. He wants CAA to be the first stop for companies seeking entertainment to fill their gigahertz cable systems, enliven their interactive video games, or peddle their products. "It's our job to be ahead of the curve," he says. "In the near future, someone with a book or a movie project won't have to be content with just putting it on television or film. And we'd better be able to tell our clients where they can find markets for their work."

To do that, Ovitz has turned his tal-

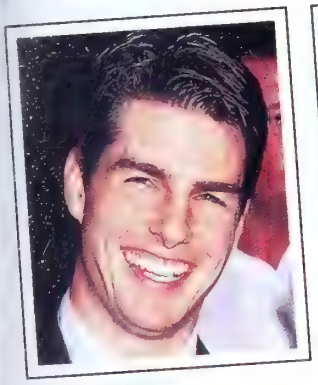
...TECHNOLOGY...

- ★ **MICROSOFT 1993:** Negotiating a joint venture with Chairman Bill Gates to produce interactive television commercials and programs.
- ★ **AT&T 1993:** Could line up programming for the company's new on-line entertainment network, among other projects.
- ★ **APPLE 1993:** Also cultivating top executives. Wants to link CAA talent to its forthcoming multimedia products.

...INVESTMENT BANKING...

- ★ **MGM 1993:** As adviser to French bank Crédit Lyonnais, Ovitz puts together a plan to clean up the studio's balance sheet and install new managers.
- ★ **MCA 1990:** Brokers Matsushita's nearly $7 billion purchase of MCA.
- ★ **COLUMBIA 1989:** Advises Sony on its $3.4 billion purchase of Columbia Pictures.
- ★ Also counseled Seagram on its $700 million investment in Time Warner. Still advising Paramount Communications on possible acquisitions or joint ventures.

) BRANCH INTO...



TOM CRUISE

KEVIN COSTNER

MICHAEL JACKSON

SYLVESTER STALLONE

dinner @ 8pm

phone home

...SPORTS...

- ★ **NIKE 1993:** Signs joint venture to work with Nike on producing sports events for television, including a proposal to stage a Super Bowl of college football.
- ★ Also represents former basketball star Magic Johnson in various business dealings and marketing ventures.

...AND ADVERTISING

- ★ **COKE 1992:** Ovitz snares creative portion of Coca-Cola account from McCann-Erickson. Produces 24 TV ads using CAA directors, actors, and writers. Just won approval for 33 more.
- ★ Also hires Stephen Carbone from rival International Creative Management to devise commercials that will work in multimedia formats.

ent shop into a jack-of-all-trades for the multimedia age. From the sleek, $16 million headquarters that I. M. Pei designed for him in Beverly Hills, Ovitz offers his clients advice on everything from advertising and investment banking to sports marketing and technology. CAA's 100-odd agents run the gamut from Armani-wearing types to gray-suited number-crunchers (page 54).

FIRM HAND. Make no mistake: Ovitz still derives his clout from the big names in his Filofax. Michael Jackson, Steven Spielberg, Kevin Costner, and so on. Just look at this summer's big movies: CAA packaged combinations of stars, directors, and writers for *Jurassic Park* and *Cliffhanger*. It represented many of the stars in *Dave*, *Sleepless in Seattle*, and *Dennis the Menace*. And Ovitz rescued *The Firm*, a project that had all but fallen apart last year when CAA client Tom Cruise balked at the directors Paramount had proposed for the film. Along came Ovitz, with client Sydney Pollack in tow. With Pollack at the helm, *The Firm* has generated $115 million in ticket sales so far.

What sets Ovitz apart, though, is his dogged push to insinuate himself and CAA into realms far beyond mere moviemaking. The MGM deal solidifies his status as Hollywood's foremost investment banker. He already advised Sony on its $3.4 billion purchase of Columbia Pictures and brokered Matsushita's nearly $7 billion acquisition of MCA.

Ovitz can be a powerful force behind the scenes, too. This spring, he offered shopping tips to Edgar Bronfman Jr., a longtime friend and president of Joseph E. Seagram Corp., who was looking to invest in a media company. In June, Bronfman plunked down more than $700 million for a 5.7% stake in Time Warner Inc. Ovitz is also advising Paramount Communications Corp. on possible deals, including a joint venture with British recording giant Thorn EMI PLC that didn't get off the ground: "He's an opportunist," says Paramount Chairman Martin S. Davis, "and I mean that in the finest sense of the word."

Last year, Ovitz spirited the creative portion of Coca-Cola Co.'s huge advertising account away from McCann-Erickson Worldwide, the soft-drink giant's longtime agency. Now, he is trying to help Nike Inc. break into sports-event promotion by producing a Super Bowl for college football, with six playoff games, TV specials, and a worldwide satellite broadcast. As with everything, Ovitz views the deal in multimedia terms: "Entertainment and sports will be the Trojan horse that brings everything else into the home," he says.

To close the loop on digital media, Ovitz is also forging ties with technology companies that produce multimedia hardware and software. In recent months, Ovitz has cultivated such high-tech heavyweights as Microsoft Chairman William H. Gates III, Apple Computer Chairman John Sculley, and Robert M. Kavner, technology czar at AT&T.

Ovitz and Gates are nearing an agreement to co-develop interactive TV commercials and programs. CAA would s ply the star power, while Micros would kick in the interactive gadget "People should think of CAA as m than just a talent agency," says Gat who first met Ovitz 18 months ago i Seattle restaurant. At the time, Ov says Gates wasn't sure why a Ho wood agent wanted to link up with software creator. Four hours later, two were convinced they should te up on interactive programming.

The first details of Ovitz' relations with AT&T emerged on July 28, w Ma Bell said it would buy into an on- service called Sierra Netwo AT&T plans to broaden network's programming, a insiders say Ovitz will line the entertainment.

TOO THIN? With such mu layered contacts, rivals qu tion whether Ovitz has gro too influential. They wond for example, whether Man so will be able to rebuff Ov when the man who hel put him atop MGM comes his studio with a pricey d And others still call Ov deal with Crédit Lyonnai conflict of interest. Jeff Berg, chairman of archri International Creative M agement, has asked the J tice Dept.'s Antitrust Div. investigate the arrangeme

A more pertinent quest might be whether Ovitz spreading himself too thin. insists that he still spe 75% of his time on client b ness. But with his pampe clientele, even the appeara that Ovitz is tending more to Gates Sculley than Cruise could prove dam ing. As Paramount President Stanley Jaffe, a longtime Ovitz champion, poi out: "In a creative business, when so one doesn't get a call back in the minutes he's allotted you, he may st to look elsewhere." Indeed, ICM's B crows that five CAA clients, includ actor James Woods, have left Ov agency in recent weeks.

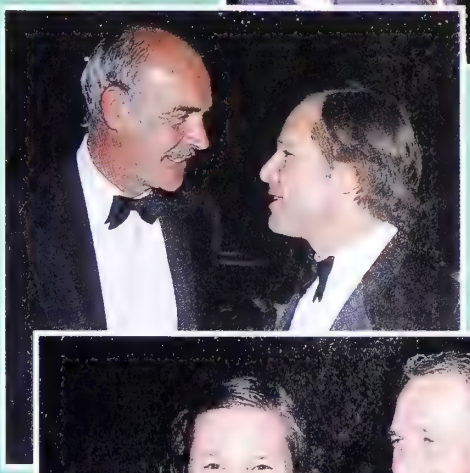
Woods may be no Madonna or Sp berg. But Ovitz can't shrug off any cli defections, since he owns little but relationships. What's more, industry perts say overall revenue in the tal agent business has dropped 20% si 1991 as Hollywood battles its costs. his part, Ovitz insists CAA's reven are up. Rivals estimate the agency ra in $200 million a year; Ovitz' 55% st could net him an estimated $10 milli Still, CAA draws its power from ephemeral network of clients and

ıtial clients. As demand for their ser-
es shifts, so must Ovitz.
The superagent learned that lesson
·ly in his career. The son of a liquor
esman, Ovitz grew up in a middle-
ss home in the San Fernando Valley.
was class president at Birmingham
gh, where his classmates included Mi-
ıel Milken and Sally Field. As a
ıngster, he frequently rode his bike to
RKO Studio lot, sneaking in to watch
they made films. "It was amazing
v they could make something magical
of such chaos," he recalls.
His parents wanted him to be a doc-
, and Ovitz soldiered through pre-
d at the University of California at
s Angeles. But having worked sum-
rs as a tour guide at Universal Studi-
and Twentieth Century Fox, Ovitz
ıght the Hollywood bug. After col-
e, he went to work for the famed
lliam Morris Agency Inc.
Corny as it sounds, Ovitz actually
rted in the mail room—the same one
t produced Hollywood aristocrats Bar-
Diller and David Geffen. He made
ent six months later, after the head of
agency found him working at 11
ı. one night studying the day's corre-
ndence. His first assignment was han-
ıg rock groups, but the wildness and
ıg use made him uneasy. So he moved
o the more sedate world of TV in-
ad and took on such clients as Merv
ffin and Rich Little.

RY POWER. By 1975, however, Ovitz
l four other agents grew restless with
stolid atmosphere at Morris. They
ided to launch their own agency in
ıtury City. At first, CAA had only a
ıdful of stars, Little and Ernest Borg-
e among them. But soon, Ovitz saw
ere the power lay. He figured if he
ıld sign up enough screenwriters and
ıer producers of raw material, the
rs would follow. His most assiduous
ırtship was of Morton Janklow, the
h-powered New York literary agent.
Packaging, a common notion these
/s, didn't exist in feature films when
itz began. But it was old hat in televi-
ı and radio. Basically, a network plan-
g a new show would turn to an agen-
such as William Morris to supply
iters, actors, and a director. Ovitz
nted to do the same for movies, but
needed compelling material. So for a
ır, Ovitz phoned Janklow's office ev-
Thursday morning at 10:30 sharp.
ıu could set your watch by him," re-
ls Janklow. "Finally, I gave him a
ıject that had fallen apart."
Within weeks, Ovitz had lined up
arlton Heston and Billy Dee Williams
the project, a story about a small-
vn police force called *Chiefs*. Better
, CAA sold it to CBS Inc. for three
ıes what Janklow says he expected
get. An informal partnership was

SCHMOOZING WITH THE MASTER

A SUPERAGENT'S NETWORKING IS NEVER DONE. SOME MORE OF THE STARS OF OVITZ' PERSONAL LEADERBOARD FROM BELOW: PENNY MARSHALL, BARRY LEVINSON MICHAEL KEATON, STEVEN SPIELBERG, PAUL NEWMAN, SEAN CONNERY, DEMI MOORE, MARTIN SCORSESE



(CLOCKWISE FROM TOP) PHOTOGRAPHS BY SMEA, RON GALELLA, LTD. ALBERT FERREIRA/DMI A. BERLINER/GAMMA LIAISON ALEX OLIVEIRA/DMI PETER C. BORSAR (2) A. BERLINER/GAMMA LIAISON

born that gave CAA access to hundreds of Janklow's "stories." Among them: *Silence of the Lambs*.

By the mid-1980s, Ovitz and his two remaining partners—CAA President Ron Meyer and William Haber—had built Hollywood's largest agency. CAA remains a reflection of its chairman: secretive, buttoned-down, and intense. Agents are smartly dressed and efficient. Some earn $1 million a year and are eligible for hefty bonuses. But the hours are torturous and the pace frenetic.

Ovitz works as hard as anyone. He rises at 6 a.m. to read six newspapers while doing 30 minutes on an exercise cycle at his Brentwood home. A black belt in karate, he spends another hour most days practicing the sport in a gym at his home with a private instructor. He takes a few days off each summer to plan his life in three- and five-year intervals. And his days are a tightly scripted routine of meetings with clients, phone calls, and 1 p.m. lunches.

Away from work, Ovitz lives a similarly ordered existence. He has been married to his wife Judy for more than 20 years. And he recently flew home for a few hours from a conference in Idaho to watch one of his three children play in a baseball game. Ovitz is currently remodeling his Brentwood home, where he keeps valuable collections of art and Chinese furniture. He also maintains homes in Malibu and Aspen.

THE JURY IS STILL OUT ON WHETHER CAA'S COKE ADS CAN SELL THE PRODUCT

Above all, Ovitz is a prodigious schmoozer. He calls a list of about 100 movers and shakers every couple of weeks, whether or not he is doing business with them. When Wall Street financier Theodore J. Forstmann was in the hospital for an operation to fix a sinus blockage, Ovitz called him regularly and sent him videos to keep him entertained. The two have never done a deal, but both hold the door open to future ventures. "I think that in what he does, the business and the personal are very mixed up," says Forstmann.

COKE COUP. Ovitz networks with the restless energy of an obscure presidential hopeful stumping in Iowa. While he was clinching the MGM deal, he flew to Atlanta to pitch his client Coca-Cola on a series of new CAA-produced TV commercials. Two days later, Ovitz was back on Walt Disney Co.'s corporate jet guest of Chief Executive Michael D. ner. His destination: New York, wl Ovitz attended a 50th birthday p for Senator Bill Bradley (D-N. J.).

Ovitz' decade-long wooing of Coke case study of his methods. He befri ed former Coke President Donald ough when Coke originally bought lumbia Pictures (and later sold i Sony Corp.). Ovitz had been pals investment banker Herbert Alle Coke director, for years and had wo with him on the MCA-Matsushita Peter Sealey, Coke's former senior president for marketing, had bee acquaintance since he ran the marke department at Columbia.

Although McCann-Erickson di know it until too late, Ovitz had planting the idea with each of them CAA could produce commercials as as a traditional Madison Avenue s As if that wasn't enough, Ovitz h Sealey's former assistant at Colum Shelly Hochron, and Len Fink, a c tive star at Chiat/Day Inc., who ta CAA the ad business.

When the showdown came with Cann last October, the Coke board mesmerized by Ovitz. "He was so ch ing that I almost started applauding

A SUPPORTING CAST OF MINIMOGULS

If Michael S. Ovitz is something of a mystery outside Hollywood, his top lieutenants are totally unknown. But to those who depend on Creative Artists Agency Inc. for advice and consent, this small circle of executives looms large. Known as the "Ovitz staff," they give the superagent the time and flexibility to roam from Wall Street to Silicon Valley seeking deals.

MR. INSIDE: MR. OUTSIDE: FORSTMANN AND OVITZ

Divide them into two categories: the traditional agents, who hold the hands and massage the egos of CAA's stars, and the specialists, whose expertise in areas such as investment banking and advertising allows Ovitz to sell CAA as a one-stop shop for digital media. A devotee of Japanese management theories, Ovitz is fanatical about running CAA as a team. Until recently, he even banned corporate titles. Still, a few executives have become stars in their own right.

Among the agents, CAA President Ron Meyer is unquestionably top dog. His client roster boasts some of Hollywood's brightest stars: Cher, Madonna, Michael Douglas, Warren Beatty, and Tom Cruise. With his op shirts and fashion wife, Kelly Chapma er is a striking con Ovitz' more bourge age. "He's the yin yang," says Ovitz.

BASIC INSTINCTS. B nie, as he is known a tough former And competitors sa as skilled a negoti Ovitz. Meyer talke las into starring *Street*, which won Academy Award. T got Douglas $15 mil starring in *Basic* The 48-year-old own instincts fail h occasionally, such a he advised client er Stallone to try h at comedy with the table *Oscar*. Meyer redeemed more recently by helping to p Stallone's action hit *Cliffhanger*.

While Meyer oversees CAA's fil chise, William Haber focuses on sion. As low-key as Meyer is

PHOTOGRAPHS BY ALAN EDINSON

uff," says John F. Bergin, a retired cCann executive. "He was exquisitely rned out. My Buick probably cost less an his suit." Ovitz has ingratiated himlf with so many Coke execs that aley's resignation on July 21 hardly ffled CAA's sails. Indeed, on the next y, the company ordered 33 more comercials from Ovitz for next year.

One problem with being on top is that ere are plenty of people who would e to see you fall. And as Ovitz barrels to the future, he is getting further d further from what got him this far. here's no telling how much of the ultimedia revolution is mere hype and w much of it really will provide a ge new market for CAA's entertainent interests. Already, some people e taking shots at itz' skills in investent banking and lvertising.

Rivals point out at Columbia has d a mixed record der Sony. And atsushita has had ltural problems ith MCA. As for GM, Ovitz told rédit Lyonnais that revived studio uld fetch at least $1 billion within two years from a cable or telephone company. But it's unclear that Mancuso can churn out the hits to meet such a prediction. Media executives also say Ovitz' presence on both sides of so many deals has fueled Hollywood's escalating costs. "He has created his own hunting preserve," says one top executive of the MGM deal.

NIKE TRIUMPH. In advertising, the jury is still out on whether the 24 ads CAA produced for Coke are selling the product or just entertaining TV viewers. *Advertising Age* critic Bob Garfield likes the spots, with their snappy jingle and "Always Coke" slogan. But he notes that "the things are riddled with technical deficiencies of all kinds."

Few doubt Ovitz' ability to win over skeptics. When Nike went before the National Collegiate Athletic Assn. last month to broach the idea of a college-football Super Bowl, Ovitz faced a virtual firing squad. Nike Chairman Philip H. Knight marveled at how he soothed the academics, who balked at teaming up with a talent agent. Now, at least they're thinking about it. "He moved them about as far as was humanly possible," says Knight.

Still, the question remains: Will Ovitz lose his iron grip on Hollywood by roaming too far afield? Of course, he doesn't think so. Indeed, soon after James Woods left, Michael J. Fox signed on.

What keeps stars such as Fox coming is a simple fact: Michael Ovitz gets startling results. Just ask talk-show host and client David Letterman, who last December won a $42 million three-year contract to jump from NBC to CBS. "That's so much money," he says, "you just laugh and laugh until things start coming out your nose." Of lesser things are Hollywood legends made.

By Ronald Grover in Beverly Hills, Calif., with Mark Landler and Michael Oneal in New York

MEYER: COMPETITORS SAY HIS SKILLS RIVAL OVITZ'

ne 51-year-old Has packaged such TV s *The Golden Girls npty Nest.* He helps er Aaron Spelling projects in addio overseeing the Cola Co. account. ke Meyer, he owns ly a 20% stake in ency.

h his aggressive Ovitz inevitably s with other facn Hollywood. That's Ray Kurtzman in. As CAA's chief r, the 66-year-old nan struck a compromise with Hold's unions when they protested CAA's arrangement with Crédit ais was a conflict of interest. nan signs off on all of CAA's deals. s known Ovitz since the two had ing offices at William Morris Agen. On the few occasions Ovitz loses ol, says one insider, it is Kurtzho "tells him to cork it."

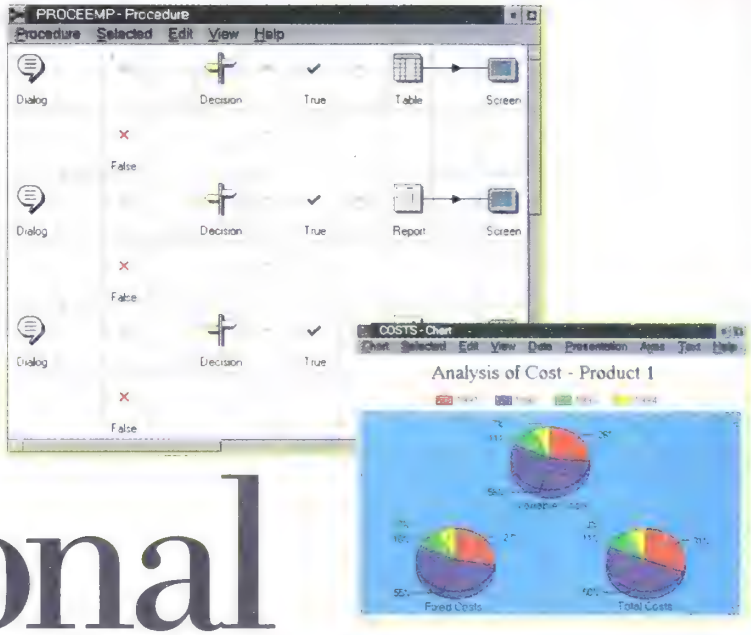
Kurtzman is CAA's consummate Mr. then Sandy Climan is its Mr. Out. A 37-year-old Harvard MBA, Climan Ovitz' 10-person corporate-finance Functioning as an investment bou- Climan's group gathered information for Barry Diller before he bought a stake in the QVC home-shopping network and for director Sydney Pollack when he considered seeking public funds for his film projects. Along with CAA Chief Financial Officer Bob Goldman, Climan helped engineer Matsushita's purchase of MCA and the recent MGM restructuring.

HAPPY CLIENTS. More recently, Climan has helped Ovitz branch out from brokering deals to creating new ventures. He greased talks between Ovitz and Microsoft Corp. Chairman William H. Gates III through a Harvard classmate, Steven A. Ballmer, now a Microsoft executive. Climan also pushed along talks with Nike Inc. Chairman Philip H. Knight during a basketball game in Portland, Ore.

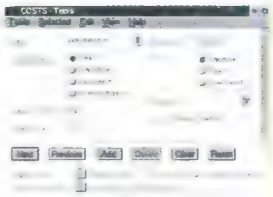
Ovitz has stocked CAA's marketing and technology groups with a mixture of specialists and old-line agents. Len Fink, who with Shelly Hochron runs the Coke account, came from cutting-edge ad agency Chiat/Day Inc. But Stephen Carbone, who just joined CAA to head its multimedia marketing efforts, is a veteran agent from competitor International Creative Management, where he had started up its advertising team. Another CAA agent, Dan Adler, heads Ovitz' seven-person technology group. All seven members of that team were trained as agents.

Some rivals question the wisdom of Ovitz' use of agents for other businesses. "We concentrate on representing our clients, not investment banking or making commercials," says ICM's Jeffrey Berg. As long as his clients are happy, though, there's no reason Michael Ovitz won't continue to push his agents beyond the mere care and feeding of stars.

By Ronald Grover in Beverly Hills



Make a personal statement in an impersonal world.



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THE GLOBAL PATENT RACE PICKS UP SPEED

BUSINESS WEEK's rankings reflect a worldwide surge of interest in winning the U.S. jackpot

p until the late 1980s, Digital Equipment Corp. gave short shrift to patents. DEC founder nneth H. Olsen believed that comter technology moved too rapidly for ents to offer much protection. What's re, he encouraged other companies use DEC's technology to make add- products that would raise demand its computers. In 1985, DEC received st 20 U. S. patents—a tenth of the mber garnered by panese rival Fujit- Ltd.

Olsen's conviction n ran up against anging times, hower. Patents grew value, thanks to art rulings and a wdown in the evoion of computers. C began to see cied treasure in its entions. And deisively, the compa- needed to build a tent war chest to ve something to ide when other npanies sought valties on patents at DEC needed to ense.

REEDOM." With sen's blessing, C's patent-filing achinery went into gh gear. Last year, en though the npany's profits aporated, it won 3 U. S. patents—an evenfold increase. ys DEC attorney rry N. Young: ur patents can be sword or a shield. ey give us freem of action."

DEC's story is rdly unique. Plen- of attention has been given to the surge in U. S. patents won by Japanese companies. Less noticed is that big U. S. companies, from DuPont to Texaco to Philip Morris, have strongly stepped up their patent activity. Indeed, after years of steady decline, the share of U. S. patents won by American inventors is inching upward. Excluding design patents and other special cases, the proportion earned by American inventors has gone from a low of 51.9% in 1988 to 53% in 1991 and 53.5% in 1992, according to CHI Research Inc., a patent consulting firm in Haddon Heights, N. J.

U. S. industry's aggressiveness may soon be matched by a new toughness on the part of Washington. President Clinton's nominee for commissioner of the Patent & Trademark Office, Bruce A. Lehman, believes that the Bush Administration was prepared to give up too much in return for too little in its negotiations over international patent policy. Lehman is taking a second look at a Bush plan to "harmonize" U. S. patent law with the rest of the world's—by discarding America's 200-year-old system of awarding patents.

FIRST DIBS. Lehman, a Washington copyright attorney who headed Clinton's transition team for the Patent & Trademark Office, is likely to follow Clinton's hardball policy on trade issues. For uniformity and efficiency, other countries are pressing the U. S. to embrace their system of awarding a patent to the first inventor who applies on a particular invention. The U. S., by contrast, awards patents to the original inventor, even if someone else gets to the Patent Office first. Whether to keep that venerable system—highly prized

THE STRONGEST PATENT PORTFOLIOS

Company/ Headquarters country	Number of U.S. patents 1992	Current impact index 1992	Techno-logical strength 1992	Techno-logical strength 1991 (rank)
1. **CANON** Japan	1118	1.76	1971	3
2. **HITACHI** Japan	1165	1.45	1688	2
3. **TOSHIBA** Japan	1176	1.29	1514	1
4. **IBM** U.S.	842	1.77	1488	6
5. **GENERAL ELECTRIC** U.S.	995	1.24	1236	8
6. **MITSUBISHI ELECTRIC** Japan	976	1.18	1147	4
7. **MOTOROLA** U.S.	671	1.68	1126	10
8. **EASTMAN KODAK** U.S.	804	1.25	1005	5
9. **XEROX** U.S.	477	2.08	990	18
10. **AT&T** U.S.	528	1.81	955	11
11. **MATSUSHITA ELECTRIC** Japan	732	1.27	931	16
12. **GENERAL MOTORS** U.S.	790	1.17	925	7
13. **FUJI PHOTO FILM** Japan	652	1.10	719	9
14. **NISSAN MOTOR** Japan	395	1.80	709	13
15. **NEC** Japan	502	1.41	709	15
16. **TEXAS INSTRUMENTS** U.S.	401	1.76	707	14
17. **FUJITSU** Japan	443	1.57	697	19
18. **DUPONT** U.S.	684	0.94	644	17
19. **PHILIPS** Netherlands	607	0.97	589	12
20. **SONY** Japan	446	1.26	560	29
21. **RICOH** Japan	366	1.53	559	30
22. **3M** U.S.	395	1.40	555	21
23. **BAYER** Germany	692	0.73	507	28
24. **SHARP** Japan	394	1.21	477	25
25. **SIEMENS** Germany	550	0.85	468	20

*Including GM Hughes Electronics

NOTE: Current impact index measures the number of times a company's patents are cited in other patents. Technological strength is a multiple of number of patents and the impact index. A more complete explanation is on page 59.

DATA: CHI RESEARCH INC.

by independent inventors—is topic No. 1 in patent circles.

Most big U. S. companies favor a switch to the international first-to-file system, partly because it would reduce the threat of "submarine patents"—legal torpedoes issued to obscure inventors who convince the Patent Office that they had an idea first and then sock corporate giants for millions in royalties. On the other hand, Lehman knows that big foreign companies also strongly favor ditching first-to-invent. So, indications are that he won't endorse the switch without trying to win major concessions from abroad—in particular, better patent protection for foreign companies in Japan, where the average wait for a patent is five years, vs. 18 months in the U. S.

POLYGLOT GROUP. What happens to the U. S. patent system is of intense interest to companies around the world because winning a patent on an important product in the U. S. is like hitting the jackpot. It grants 17 years of exclusive rights to make and sell a product in the world's largest market. And a U. S. patent carries weight beyond America's borders. It makes little sense for a competitor to invest heavily in a me-too product for global distribution if it will be excluded from the essential U. S. market. No wonder, then, that U. S. patents were awarded last year to inventors living everywhere from Switzerland to Senegal.

BUSINESS WEEK's Patent Scoreboard, prepared by CHI Research from government data, shows how winners of U. S. patents performed in four key categories. The first three are repeats from last year's Scoreboard: the number of patents; current impact, which is how frequently a company's recent patents are cited in other patents; and technological strength, a combination of the first two measures. The leader in technological strength in this year's Scoreboard, up from third in last year's: Japan's Canon Inc., which has won a slew of U. S. patents for, among other things, its innovative printing technology. Canon's bubble-jet printer heads have rows of microscopic nozzles that spurt tiny blobs of ink onto paper 6,200 times per second. IBM was the highest-ranked U. S. company, up two notches, to fourth.

The fourth Scoreboard category—new this year—is science linkage. It measures how often a company's patents make references to scientific papers. The numbers vary a lot by industry. Companies with big numbers—say, a pharmaceutical company such as Upjohn, with 9.84 scientific citations per patent—work much closer to the cutting edge of science than, say, an auto maker such as Mazda Motor Corp., which had a 1992 rating of 0.

Studying the science linkage of patents reveals some interesting patterns.

COMPANIES WITH FREQUENTLY CITED PATENTS...

Company/ Headquarters country	1992 current impact index
CORDIS U.S.	2.68
XEROX U.S.	2.08
MITSUBISHI MOTORS Japan	2.05
NTT Japan	2.05
AMP U.S.	1.94
DIGITAL EQUIPMENT U.S.	1.92
INTEL U.S.	1.88
PROCTER & GAMBLE U.S.	1.81
AT&T U.S.	1.81
NISSAN MOTOR Japan	1.80
IBM U.S.	1.77
TEXAS INSTRUMENTS U.S.	1.76
CANON Japan	1.76
KIMBERLY-CLARK U.S.	1.74
MOTOROLA U.S.	1.68

...AND THOSE AT THE CUTTING EDGE

Company/ Headquarters country	1992 science linkage*
UPJOHN U.S.	9.84
ROCHE HOLDING U.S.	9.11
WELLCOME Britain	4.44
MERCK U.S.	4.20
BRISTOL-MYERS SQUIBB U.S.	4.03
SCHERING-PLOUGH U.S.	3.88
ELI LILLY U.S.	3.46
BRITISH TELECOM Britain	3.02
MONSANTO U.S.	2.91
ALZA U.S.	2.52
BECTON DICKINSON U.S.	2.52
ABBOTT LABORATORIES U.S.	2.48
SYNTEX U.S.	2.40
UNOCAL U.S.	2.39
SMITHKLINE BEECHAM Britain	2.38

DATA: CHI RESEARCH INC

*Average citations per patent to scientific literature

For one thing, Japanese companies, on average, rank lower than U. S. companies in the number of scientific references in their patents. It may be just a difference in the style of writing applications, but CHI President Francis Narin believes that the gap confirms the widely held belief that American research-and-development labs remain at the forefront.

So why do Japanese companies such as Toshiba Corp. continue to excel in the marketplace? In science linkage, Toshiba ranks toward the bottom of the electrical industry, yet the company is a market leader in a stunning array of products, from semiconductors to notebook computers to advanced med imaging gear. One secret is hov moves ideas out of the lab, says Se Executive Vice-president Sei-ichi Tal anagi: "A researcher with a good i can stick with it through the deve ment phase and then transfer to a s division to create a successful prod That system is very rare in Americ

A patent offensive won't help Am can companies match the likes of To ba in product development. But wha might help them to do is defeat fore and domestic rivals through the le system by combating alleged infrin ments. A word of caution, though: U strong patent protection by sympath courts can end up h ing consumers by ducing their choice suppliers. Ever si the 1982 formation special federal app court in Washingto hear patent cases, judiciary has swung ward upholding br claims of patent fringement, poss chilling competit Says Boston Univer law professor Rober Merges: "There is m fear now that a part lar line of research longs to Company X

TRUST FUND. Litiga companies say the just protecting t property. They draw spiration from Texas struments Inc., wh funds most of its effort with income f patent licenses. It scooped up $1.2 bil in royalties since 1 including $391 mil last year alone—m of it from the Japan Intel Corp., a lateco to the patent race, expects to apply 400 this year, up from 100 filings 1990. The chipmaker is also chasing leged infringers harder. Warns Int general counsel, F. Thomas Dunlap "Life's going to get tougher and toug for imitators that are just trying to s other people's intellectual property."

Rivals may grumble. But as long courts, lawmakers, and the Clinton ministration are sympathetic, count U. S. companies to mine their pat portfolios for every last ounce of inv tor's gold.

By Peter Coy in New York, with J Carey in Washington, Neil Gross in kyo, and bureau reports

PATENT SCOREBOARD

GLOSSARY

NUMBER OF PATENTS: The number of patents granted by the U.S. Patent Office. The number excludes design patents and other special cases.

CURRENT IMPACT INDEX: A measure of how important a company's patents are based on how often they're cited in other patents, which shows how frequently they're used as the foundation for other inventions. For example, a company's 1992 index is computed by first calculating the average number of times the patents it was granted in each of the previous five years were cited in new patents granted in 1992. Those figures are divided by the average number of 1992 citations for all U.S. patents in each of the previous five years. That yields a citation rate for each year. A rating of 1.0 means that the company's patents were cited as often as the overall average. A rating of 1.2 means that the company's patents were cited 20% more often than average. Finally, the citation rate for each of the five years is averaged to get the 1992 rating.

TECHNOLOGICAL STRENGTH: The Number of Patents times the Current Impact Index.

SCIENCE LINKAGE: The number of references per patent to journal papers and other scientific publications. The higher the number, the more the company is doing research and development at the forefront of science and technology.

DATA:CHI RESEARCH, INC

COMPANY	NUMBER OF PATENTS			CURRENT IMPACT INDEX			TECHNOLOGICAL STRENGTH			SCIENCE LINKAGE		
	1992	AVG. 1988-92	% CHANGE 1988-92	1992	AVG. 1988-92	% CHANGE 1988-92	1992	AVG. 1988-92	% CHANGE 1988-92	1992	AVG. 1988-92	% CHANGE 1988-92
AEROSPACE												
GROUP COMPOSITE	**1499**	**1475**	**5**	**0.96**	**1.00**	**−1**	**1440**	**1471**	**6**	**0.44**	**0.54**	**−2**
1 GM Hughes Electronics	321	306	10	1.12	1.29	−3	361	394	10	0.75	1.00	−8
2 United Technologies	366	336	7	0.96	0.96	0	350	324	8	0.16	0.20	−2
3 Boeing	185	193	3	0.85	0.87	4	158	168	9	0.48	0.42	37
4 Rockwell International	152	163	0	1.01	1.06	−1	154	172	−1	0.34	0.54	−9
5 Raytheon	102	90	14	0.94	1.03	−2	96	93	12	0.77	0.62	11
6 Textron	91	87	5	0.71	0.80	−2	65	69	3	0.10	0.05	128
7 Litton Industries	54	71	−9	1.03	1.10	−5	55	80	−15	1.33	1.74	1
8 Rolls-Royce	79	59	21	0.70	0.70	−1	55	41	24	0.10	0.21	72
9 Lockheed	34	50	−7	1.27	1.05	7	43	52	3	0.12	0.22	22
10 British Aerospace	48	48	16	0.71	0.68	15	34	34	45	0.40	0.16	182
11 McDonnell Douglas	33	34	5	0.91	0.88	2	30	31	14	0.39	0.42	−2
12 General Dynamics	35	39	21	0.82	0.97	−3	29	38	19	0.63	0.36	284
AUTOMOBILES												
GROUP COMPOSITE	**2184**	**2289**	**−1**	**1.27**	**1.38**	**−3**	**2765**	**3170**	**−4**	**0.22**	**0.14**	**32**
1 Nissan Motor	395	353	12	1.80	1.79	3	709	639	16	0.06	0.07	23
2 General Motors †	474	453	4	1.20	1.28	0	569	579	4	0.71	0.38	71
3 Mazda Motor	215	173	11	1.60	1.75	−5	344	303	7	0.00	0.01	11
4 Toyota Motor	233	315	−14	1.42	1.49	−3	332	475	−15	0.13	0.08	73
5 Ford Motor	237	185	13	1.14	1.26	−2	271	232	11	0.19	0.18	44
6 Honda Motor	207	319	−12	1.02	1.33	−10	210	439	−20	0.06	0.02	104
7 Daimler-Benz	247	281	1	0.85	0.90	−3	209	253	−2	0.14	0.18	−10
8 Mitsubishi Motors	37	36	9	2.05	2.30	2	76	83	13	0.00	0.01	NM
9 Chrysler	65	91	0	0.98	1.33	−13	64	121	−12	0.00	0.07	−41
10 Porsche	45	49	2	0.91	1.05	−6	41	52	−5	0.09	0.07	32
11 BMW	10	16	−11	1.12	0.92	19	11	15	5	0.00	0.04	−3
12 Volvo	20	18	21	0.54	0.73	−12	11	13	10	0.00	0.01	NM
CHEMICALS												
GROUP COMPOSITE	**6250**	**6070**	**5**	**0.82**	**0.84**	**−1**	**5150**	**5067**	**3**	**1.01**	**0.86**	**11**
1 DuPont	684	581	12	0.94	1.03	−5	644	592	7	1.32	1.12	13
2 Minnesota Mining & Mfg.	395	357	10	1.40	1.35	0	555	482	9	1.01	0.87	15
3 Bayer	692	686	3	0.73	0.73	−2	507	501	1	0.57	0.52	1
4 Hoechst	623	570	8	0.74	0.80	−1	460	456	7	0.90	0.87	12
5 Dow Chemical	428	470	−3	0.86	0.82	2	368	384	−1	1.58	1.26	14
6 BASF	484	440	8	0.66	0.67	−1	319	294	6	0.70	0.60	13
7 Ciba-Geigy	347	389	3	0.72	0.78	−2	249	304	2	1.18	0.97	13
8 Union Carbide	155	149	2	1.24	1.09	4	193	163	6	1.30	0.98	17
9 Imperial Chemical Industries	249	255	5	0.74	0.79	−5	184	199	−2	0.81	0.60	24
10 Shin-Etsu Chemical	174	109	27	0.93	1.02	−7	162	109	22	0.18	0.22	27
11 Olin	122	98	19	1.13	1.26	−2	138	124	21	0.75	0.75	−1
12 Monsanto	189	150	14	0.73	0.71	7	138	109	23	2.91	2.47	35
13 W.R. Grace	137	121	9	0.99	1.14	−6	136	137	3	1.75	1.28	40
14 American Cyanamid	143	126	9	0.92	0.78	8	131	99	20	1.85	1.02	136
15 Rhône-Poulenc	180	219	−6	0.64	0.59	3	115	130	−3	0.79	0.77	21
16 Sumitomo Chemical	152	152	3	0.72	0.79	−7	109	120	−3	0.55	0.63	1

† excluding GM Hughes Electronics

PATENT SCOREBOARD

COMPANY	NUMBER OF PATENTS			CURRENT IMPACT INDEX			TECHNOLOGICAL STRENGTH			SCIENCE LINKAGE		
	1992	AVG. 1988-92	% CHANGE 1988-92	1992	AVG. 1988-92	% CHANGE 1988-92	1992	AVG. 1988-92	% CHANGE 1988-92	1992	AVG. 1988-92	% CHANG 1988-9
17 Air Products & Chemicals	92	103	12	1.12	1.16	0	103	118	6	1.41	1.26	7
18 Mitsubishi Kasei	113	105	9	0.88	0.78	5	100	82	15	0.51	0.35	47
19 Ethyl	123	111	24	0.68	0.75	0	83	82	29	0.55	1.30	−24
20 Akzo	104	94	9	0.75	0.77	−1	79	73	10	0.91	1.10	3
21 Degussa	119	120	8	0.57	0.54	−1	68	65	5	0.61	0.39	20
22 PPG Industries	79	111	−11	0.80	0.84	2	64	93	−14	0.32	0.49	7
23 Asahi Chemical Industry	56	63	−6	0.95	0.96	−1	53	61	−8	1.55	0.99	26
24 FMC	81	77	3	0.59	0.59	2	48	46	5	0.53	0.74	−16
25 Montedison	95	104	0	0.50	0.58	0	48	61	4	1.27	0.85	19
26 Toray Industries	45	46	−3	1.04	1.02	0	47	47	−4	0.42	0.38	12
27 Kureha Chemical	38	50	−10	1.16	1.02	13	44	51	8	1.53	0.97	81
28 VEBA	81	97	−4	0.52	0.52	5	42	50	0	0.28	0.31	0
29 Henkel	73	118	−10	0.54	0.61	−3	39	74	−10	0.25	0.43	−5
4 COMPUTERS												
GROUP COMPOSITE	**3553**	**2894**	**13**	**1.64**	**1.61**	**1**	**5824**	**4673**	**15**	**0.64**	**0.65**	**10**
1 International Business Machines	842	662	12	1.77	1.73	2	1488	1150	14	0.82	0.85	1
2 Motorola	671	495	18	1.68	1.54	3	1126	771	22	0.39	0.55	−15
3 Texas Instruments	401	333	29	1.76	1.74	6	707	593	45	0.82	1.10	86
4 Fujitsu	443	340	14	1.57	1.58	0	697	536	14	0.67	0.59	18
5 AMP	237	241	4	1.94	1.91	1	461	458	5	0.08	0.17	−14
6 Hewlett-Packard	351	264	24	1.27	1.22	0	447	321	24	0.78	0.66	31
7 Digital Equipment	223	132	62	1.92	1.80	0	429	235	63	1.37	0.77	57
8 Intel	75	52	25	1.88	2.09	−3	141	107	23	0.41	0.47	−1
9 NCR	86	93	4	1.34	1.49	−5	115	138	−2	0.15	0.20	54
10 Unisys	86	92	−2	1.22	1.31	−4	105	121	−6	0.43	0.30	58
11 Tektronix	82	133	−17	1.24	1.33	−4	101	179	−22	0.18	0.33	13
12 Groupe Bull	57	57	11	1.44	1.56	−4	82	90	10	0.14	0.22	17
5 ELECTRICAL												
GROUP COMPOSITE	**7824**	**7573**	**4**	**1.14**	**1.19**	**−2**	**8953**	**9020**	**1**	**0.46**	**0.45**	**2**
1 Hitachi	1165	1132	3	1.45	1.46	−1	1688	1650	2	0.43	0.38	9
2 Toshiba	1176	1058	9	1.29	1.40	−3	1514	1483	7	0.37	0.39	0
3 General Electric	995	944	1	1.24	1.19	0	1236	1127	1	0.52	0.57	0
4 Mitsubishi Electric	976	837	16	1.18	1.19	0	1147	998	16	0.51	0.46	7
5 NEC	502	477	7	1.41	1.58	−5	709	754	3	0.33	0.37	3
6 Siemens	550	666	−5	0.85	0.98	−6	468	657	−11	0.56	0.67	−7
7 AlliedSignal	361	308	5	1.06	0.97	3	381	299	8	0.66	0.58	10
8 Westinghouse Electric	379	437	−4	0.94	1.01	−5	356	444	−9	0.37	0.32	8
9 Sumitomo Electric Industries	221	170	20	1.28	1.36	−3	283	229	18	0.81	0.61	23
10 Thomson	259	237	10	0.92	0.99	−5	239	233	4	0.61	0.57	3
11 Alcatel Alsthom	222	186	6	0.80	0.88	−6	177	165	0	0.71	0.56	23
12 ITT	151	166	−5	0.98	1.26	−12	148	215	−16	0.12	0.18	−16
13 Oki Electric Industry	114	95	22	1.25	1.44	−2	142	138	28	0.61	0.60	29
14 Honeywell	145	173	1	0.91	1.03	−3	132	180	0	0.37	0.40	3
15 General Electric PLC	117	131	−3	1.08	1.16	0	126	152	−3	0.39	0.66	−20
16 Sundstrand	137	162	12	0.92	1.07	−1	126	173	14	0.04	0.08	62
17 ABB Asea Brown Boveri	182	227	−7	0.69	0.76	−6	125	177	−13	0.40	0.36	35
18 Emerson Electric	121	120	4	0.80	0.94	−4	97	113	1	0.17	0.13	18
19 McDermott International	55	53	8	0.62	0.72	−5	34	38	3	0.47	0.34	10
6 ELECTRONICS												
GROUP COMPOSITE	**7123**	**6367**	**9**	**1.32**	**1.37**	**−2**	**9379**	**8678**	**7**	**0.27**	**0.26**	**4**
1 Canon	1118	903	13	1.76	1.71	2	1971	1551	17	0.24	0.21	11
2 Eastman Kodak	804	705	17	1.25	1.22	6	1005	875	25	0.48	0.56	−1
3 Xerox	477	326	18	2.08	1.77	5	990	592	26	0.51	0.53	1
4 Matsushita Electric Industrial	732	511	19	1.27	1.24	−1	931	634	19	0.36	0.39	4
5 Fuji Photo Film	652	735	5	1.10	1.49	−11	719	1094	−7	0.04	0.06	−7
6 Philips Electronics	607	741	−1	0.97	1.02	−4	589	758	−4	0.28	0.31	2
7 Sony	446	328	13	1.26	1.52	−9	560	494	3	0.21	0.17	10
8 Ricoh	366	290	20	1.53	1.52	0	559	441	22	0.20	0.10	40
9 Sharp	394	345	15	1.21	1.30	−4	477	444	11	0.36	0.40	−6
10 Minolta Camera	282	299	21	1.50	2.02	−7	423	612	20	0.02	0.06	−3
11 Pioneer Electronic	231	170	25	1.42	1.26	5	328	217	30	0.07	0.07	21
12 Olympus Optical	199	184	3	1.42	1.36	4	283	251	9	0.39	0.18	61
13 Konica	207	192	14	1.22	1.52	−5	252	292	11	0.06	0.09	15
14 Sanyo Electric	120	111	11	1.22	1.23	−1	146	137	10	0.52	0.22	53
15 Nikon	104	83	8	1.38	1.37	0	143	113	8	0.08	0.08	89
16 Murata Mfg.	124	112	7	1.14	1.02	3	141	115	12	0.02	0.04	−59

PATENT SCOREBOARD

)MPANY	NUMBER OF PATENTS			CURRENT IMPACT INDEX			TECHNOLOGICAL STRENGTH			SCIENCE LINKAGE		
	1992	AVG. 1988-92	% CHANGE 1988-92	1992	AVG. 1988-92	% CHANGE 1988-92	1992	AVG. 1988-92	% CHANGE 1988-92	1992	AVG. 1988-92	% CHANGE 1988-92
7 Alps Electric	85	128	−20	0.83	0.97	−8	70	129	−26	0.02	0.04	6
8 Zenith Electronics	61	62	−5	1.13	1.24	−3	69	77	−8	0.11	0.18	8
9 Black & Decker	71	90	−8	0.95	0.79	4	67	71	−2	0.01	0.04	231
0 Polaroid	44	59	−6	1.03	1.10	−1	45	65	−5	0.82	0.83	28
FOOD												
ROUP COMPOSITE	**797**	**718**	**10**	**1.15**	**1.21**	**−1**	**920**	**866**	**9**	**0.97**	**0.83**	**16**
1 Procter & Gamble	166	149	15	1.81	1.84	2	301	276	18	1.90	1.30	19
2 Unilever	176	158	10	1.01	1.02	−3	178	159	5	0.71	0.86	11
3 Philip Morris	132	93	21	0.93	0.86	1	123	80	22	0.31	0.49	42
4 RJR Nabisco Holdings	69	85	−1	1.37	1.24	6	95	105	7	2.10	1.35	109
5 Kao	93	70	19	0.77	0.87	−7	72	60	9	0.31	0.21	92
6 Colgate-Palmolive	57	69	5	1.06	1.44	−1	61	100	7	0.46	0.23	41
7 Nestle	79	67	9	0.73	0.76	−2	58	51	8	0.96	0.73	38
8 Ajinomoto	25	29	0	0.53	0.91	7	13	26	9	0.72	1.07	0
FUELS												
ROUP COMPOSITE	**2416**	**2348**	**5**	**0.90**	**0.95**	**−1**	**2168**	**2233**	**4**	**0.70**	**0.65**	**4**
1 Mobil	314	336	8	1.16	1.31	−3	363	439	5	0.65	0.43	31
2 Royal Dutch/Shell Group	318	312	13	0.89	0.90	3	283	286	21	0.70	0.65	2
3 Amoco	193	182	5	0.93	0.92	3	179	169	10	0.52	0.49	2
4 Texaco	192	146	18	0.92	0.86	1	177	126	19	0.45	0.26	83
5 Phillips Petroleum	173	154	3	0.96	0.89	6	166	139	10	0.67	0.56	19
6 Exxon	226	222	10	0.73	0.89	−2	165	200	11	0.69	0.69	−3
7 Elf Aquitaine	198	182	2	0.70	0.73	−4	138	133	−2	0.80	0.92	9
8 Schlumberger	111	120	12	1.14	1.17	−2	127	141	12	1.00	1.28	2
9 Atlantic Richfield	103	104	−2	0.92	0.95	−1	95	98	−3	0.70	0.46	37
0 UOP	103	110	24	0.89	0.94	3	92	106	40	0.53	0.72	27
1 Unocal	88	76	10	0.97	1.29	−7	85	97	3	2.39	1.75	16
2 Chevron	86	81	−1	0.93	0.97	2	80	78	−1	0.55	0.61	35
3 British Petroleum	128	135	−2	0.60	0.65	−6	77	89	−8	0.77	0.94	−7
4 Mitsui Petrochemical	81	69	40	0.71	1.09	−12	58	69	23	0.27	0.16	36
5 Nippon Oil	57	51	3	0.95	0.87	7	54	44	10	0.19	0.38	13
6 Occidental Petroleum	28	32	−4	0.90	0.80	11	25	25	3	0.54	0.74	3
7 Ashland Oil	21	39	−23	0.47	0.67	−16	10	32	−28	0.19	0.16	193
HEALTH CARE												
ROUP COMPOSITE	**2314**	**2255**	**5**	**1.03**	**1.02**	**2**	**2374**	**2313**	**7**	**2.66**	**1.89**	**17**
1 Merck	208	185	10	1.09	1.02	1	227	188	10	4.20	2.60	22
2 Abbott Laboratories	140	81	33	1.58	1.38	8	221	116	43	2.48	2.53	30
3 Bristol-Myers Squibb	227	192	7	0.95	0.95	−3	215	183	5	4.03	2.19	35
4 Eli Lilly	115	111	4	1.41	1.22	13	163	137	17	3.46	3.23	11
5 Johnson & Johnson	136	137	3	1.13	1.18	0	153	162	3	0.59	0.76	−3
6 Pfizer	123	123	6	1.19	1.05	11	147	131	18	1.07	1.69	−6
7 Warner-Lambert	93	111	−4	1.26	1.36	10	117	153	7	1.28	0.84	54
8 American Home Products	119	123	2	0.94	0.85	6	112	104	8	1.96	1.78	9
9 Becton, Dickinson	73	66	24	1.50	1.20	17	109	81	46	2.52	1.33	56
0 Kimberly-Clark	59	68	−1	1.74	1.59	2	102	108	3	1.08	0.98	64
1 Cordis	36	26	12	2.68	2.09	10	97	57	26	0.28	0.22	−49
2 Baxter International	64	76	−2	1.51	1.46	2	97	110	−2	0.63	0.82	14
3 Roche Holding	128	112	15	0.70	0.75	−2	90	83	14	9.11	5.74	42
4 Sulzer Brothers	88	85	3	0.81	0.89	0	72	76	4	0.09	0.10	66
5 Alza	42	43	1	1.50	2.10	−1	63	90	2	2.52	1.51	58
6 L'Oréal	86	89	18	0.71	0.86	−4	61	76	13	0.47	0.51	−1
7 Böhringer Mannheim	67	65	16	0.91	0.96	2	61	63	21	1.51	1.13	20
8 Takeda Chemical Industries	80	81	9	0.50	0.76	−10	40	62	−1	2.01	1.51	18
9 SmithKline Beecham	69	89	−4	0.56	0.56	−1	39	50	−5	2.38	2.28	0
0 Schering	63	70	7	0.58	0.59	−2	37	41	4	1.40	1.32	35
1 Sandoz	54	66	−5	0.65	0.60	9	35	39	5	1.46	0.99	53
2 Syntex	40	44	−3	0.73	0.84	5	29	37	−8	2.40	2.24	21
3 Wellcome	41	39	9	0.71	1.34	42	29	56	81	4.44	3.54	10
4 Fujisawa Pharmaceutical	40	43	5	0.70	0.55	14	28	24	20	0.98	0.84	2
5 Schering-Plough	33	50	0	0.72	0.97	−7	24	50	−1	3.88	2.95	26
6 Glaxo Holdings	45	39	60	0.49	0.88	44	22	37	228	1.93	1.17	24
7 Upjohn	31	25	27	0.47	0.47	3	15	11	20	9.84	5.28	44
8 Yamanouchi Pharmaceutical	15	17	−6	0.75	0.71	−4	11	12	−9	1.00	0.35	304
0 INDUSTRIAL PRODUCTS												
ROUP COMPOSITE	**1224**	**1237**	**1**	**1.11**	**1.15**	**−3**	**1363**	**1425**	**−2**	**0.18**	**0.15**	**6**
1 Robert Bosch	295	261	4	1.13	1.12	−1	332	293	3	0.09	0.12	7
2 Eaton	156	139	12	1.22	1.13	5	190	159	19	0.19	0.23	20
3 Nippondenso	108	121	−8	1.48	1.55	−5	160	191	−11	0.08	0.19	27

PATENT SCOREBOARD

COMPANY	NUMBER OF PATENTS			CURRENT IMPACT INDEX			TECHNOLOGICAL STRENGTH			SCIENCE LINKAGE		
	1992	AVG. 1988-92	% CHANGE 1988-92	1992	AVG. 1988-92	% CHANGE 1988-92	1992	AVG. 1988-92	% CHANGE 1988-92	1992	AVG. 1988-92	% CHAN 1988
4 Aisin Seiki	137	152	0	1.11	1.30	−7	152	197	−5	0.04	0.03	1
5 Bridgestone	131	123	2	0.95	0.92	−3	124	113	−1	0.22	0.14	9
6 TRW	91	101	4	1.32	1.29	2	120	130	4	0.36	0.35	−
7 NGK Insulators	97	91	15	1.16	1.19	5	113	111	31	0.35	0.21	3
8 Illinois Tool Works	90	89	0	1.01	1.12	−4	91	99	−3	0.02	0.03	1
9 Lucas Industries	55	80	−2	0.81	0.83	−5	45	66	−10	0.02	0.05	−2
10 Goodyear Tire & Rubber	65	81	−6	0.64	0.67	−4	41	54	−11	0.86	0.31	22
11 MACHINERY												
GROUP COMPOSITE	1023	1045	3	0.83	0.88	−2	844	922	1	0.05	0.04	
1 Mannesmann	165	161	2	0.88	0.77	4	145	125	6	0.07	0.04	−4
2 Fanuc	123	121	13	1.13	1.46	−11	139	174	1	0.01	0.03	−2
3 Fuji Heavy Industries	60	100	1	1.28	1.59	−5	77	161	1	0.02	0.01	NM
4 MAN	118	117	0	0.63	0.64	8	75	74	8	0.00	0.02	−1
5 Komatsu	67	40	28	0.86	0.86	1	58	35	29	0.03	0.13	
6 Mitsubishi Heavy Industries	95	75	11	0.60	0.68	−3	57	51	10	0.08	0.07	3
7 Cooper Industries	70	91	0	0.81	0.83	−1	57	76	−1	0.04	0.03	3
8 Caterpillar	70	72	7	0.74	0.81	7	52	59	21	0.03	0.09	
9 Ingersoll-Rand	80	65	17	0.63	0.62	8	51	41	28	0.01	0.02	−6
10 Deere	63	88	−5	0.73	0.74	2	46	64	−5	0.00	0.01	−7
11 Daikin Industries	58	44	23	0.67	0.79	1	39	35	29	0.26	0.12	5
12 Kubota	33	39	−7	0.57	0.89	11	19	36	−16	0.09	0.02	
13 Kawasaki Heavy Industries	22	32	−16	0.54	0.71	−10	12	24	−23	0.05	0.01	NM
12 METALS & MATERIALS												
GROUP COMPOSITE	670	674	0	0.90	0.90	−1	605	607	−1	0.35	0.34	−
1 Compagnie de Saint-Gobain	118	97	10	1.02	0.95	3	120	93	13	0.14	0.17	
2 Corning	84	75	8	1.26	1.23	1	106	92	13	0.36	0.47	−1
3 Asahi Glass	85	65	16	0.93	0.96	−2	79	63	15	0.24	0.16	3
4 Aluminum Co. of America	61	73	−7	0.95	0.86	5	58	63	0	1.18	0.83	4
5 Sumitomo Metals Industries	58	52	13	0.98	1.03	1	57	54	14	0.69	1.22	
6 Nippon Steel	94	81	14	0.59	0.60	2	56	49	17	0.31	0.32	
7 Pilkington	29	40	2	1.20	1.16	2	35	46	4	0.28	0.11	10
8 Owens-Illinois	35	49	−13	0.97	0.97	−2	34	48	−13	0.00	0.01	−2
9 Kawasaki Steel	47	56	0	0.71	0.69	−1	33	38	−4	0.15	0.18	4
10 Pechiney	51	59	−8	0.56	0.83	−16	29	51	−22	0.08	0.16	3
11 Kobe Steel	8	29	−18	0.73	0.63	3	6	17	−18	0.88	0.29	16
13 TELECOMMUNICATIONS												
GROUP COMPOSITE	987	1052	−1	1.47	1.47	−1	1456	1544	−2	1.35	1.39	
1 American Telephone & Telegraph	528	522	4	1.81	1.76	1	955	918	5	1.57	1.72	
2 GTE	181	243	−8	0.89	0.96	−4	161	234	−12	0.82	0.81	2
3 Nippon Telegraph & Telephone	71	65	4	2.05	2.11	−4	145	137	1	1.23	1.28	
4 BCE	94	120	−11	1.29	1.27	−2	121	154	−12	0.69	0.69	1
5 British Telecommunications	60	64	5	1.34	1.42	−1	80	91	4	3.02	2.96	1
6 L. M. Ericsson	53	37	14	0.96	0.94	−1	51	35	16	0.42	0.49	1

ALPHABETICAL LIST OF COMPANIES

The number following each company name identifies the Scoreboard category under which it is listed

ABB Asea Brown Boveri **5**
[illegible] **9**
[illegible] **3**
[illegible] **10**
[illegible] **7**
Aug[illegible] **3**
Acute Authori[illegible] **5**
[illegible] **5**
Alps Electric **6**
[illegible] **12**
[illegible] **9**
[illegible] **3**
American Home Products **9**
[illegible] **13**
Arm[illegible] **8**
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Asahi Chemical Industry **3**
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[illegible] **8**
BASF **3**
[illegible] **9**
Bayer **3**
BCE **13**
[illegible] **9**
[illegible] **6**
BMW **2**
Boeing **1**
Boehringer Mannheim **9**
Bridgestone **10**
Bristol-Myers Squibb **9**
British Aerospace **1**
British Petroleum **8**
British Telecommunications **13**
Canon **6**
[illegible] **11**
Chevron **8**
[illegible] **2**
Ciba-Geigy **3**
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[illegible] **9**
Corning **12**
[illegible] **11**
Daimler Benz **2**
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Degussa **3**
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Dow Chemical **3**
DuPont **3**
[illegible] **6**
Eaton **10**
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Emerson Electric **5**
Ericsson (L M) **13**
Ethyl **3**
Exxon **8**
[illegible] **11**
[illegible] **3**
Ford Motor **2**
[illegible] **11**
Fuji Photo Film **6**
Fujisawa Pharmaceutical **9**
[illegible] **4**
General Dynamics **1**
General Electric **5**
General Electric P.C **5**
General Motors **2**
[illegible] **9**
GM Hughes Electronics **1**
Goodyear Tire & Rubber **10**
Grace (W R) **3**
Groupe Bull **4**
GTE **13**
[illegible] **3**
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[illegible] **5**
Hoechst **3**
[illegible] **2**
Honeywell **5**
Illinois Tool Works **10**
Imperial Chemical Industries **3**
[illegible] **11**
[illegible] **4**
Int'l Business Machines **4**
ITT **5**
Johnson & Johnson **9**
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Kawasaki Heavy Industries **11**
Kawasaki Steel **12**
Kimberly-Clark **9**
Kobe Steel **12**
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Kureha Chemical **3**
Lilly (Eli) **9**
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Lockheed **1**
[illegible] **10**
MAN **11**
[illegible] **11**
Matsushita Electric Industrial **6**
Mazda Motor **2**
McDermott International **5**
McDonnell Douglas **1**
Merck **9**
Minnesota Mining & Mfg **3**
Minolta Camera **6**
Mitsubishi Electric **5**
Mitsubishi Heavy Industries **11**
Mitsubishi Kasei **3**
Mitsubishi Motors **2**
Mitsui Petrochemical **8**
Mobil **8**
Monsanto **3**
Montedison **3**
Motorola **4**
Murata Mfg **6**
NCR **4**
NEC **5**
Nestlé **7**
NGK Insulators **10**
[illegible] **6**
Nippon Oil **8**
Nippon Steel **12**
Nippon Telegraph and Telephone **13**
[illegible] **10**
Nissan Motor **2**
Occidental Petroleum **8**
Oki Electric Industry **5**
[illegible] **3**
Olympus Optical **6**
Oréal (L') **9**
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Pfizer **9**
[illegible] **7**
Philips Electronics **6**
Phillips Petroleum **8**
[illegible] **12**
Pioneer Electronic **6**
Polaroid **6**
Porsche **2**
PPG Industries **3**
Procter & Gamble **7**
Raytheon **1**
Rhône-Poulenc **3**
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RJR Nabisco Holdings **7**
Robert Bosch **10**
Roche Holding **9**
Rockwell International **1**
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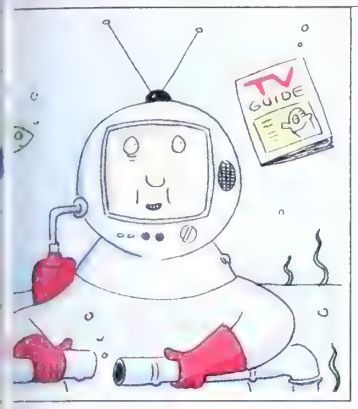
Royal Dutch/Shell Group **8**
[illegible] **12**
Sandoz **9**
Sanyo Electric **6**
Schering **9**
Schering-Plough **9**
Schlumberger **8**
Sharp **6**
Shin-Etsu Chemical **3**
Siemens **5**
SmithKline Beecham **9**
[illegible] **6**
[illegible] **9**
Sumitomo Chemical **3**
Sumitomo Electric Industries
Sumitomo Metals Industries
Sundstrand **5**
Syntex **9**
Takeda Chemical Industries
Tektronix **4**
Texaco **8**
Texas Instruments **4**
Textron **1**
Thomson **5**
Toray Industries **3**
Toshiba **5**
Toyota Motor **2**
TRW **10**
Unilever **7**
Union Carbide **3**
Unisys **4**
United Technologies **1**
Unocal **8**
[illegible] **8**
Upjohn **9**
[illegible] **3**
Volvo **2**
[illegible] **9**
Wellcome **9**
Westinghouse Electric **5**
[illegible] **6**
[illegible]
Zenith Electronics **6**

ED BY OTIS PORT

OOB-TUBE TECHNOLOGY IAT HELPS DEEP-SEA REPAIRMEN



To eliminate the need for some expensive offshore platforms, oil and gas companies have been moving equipment from the rigs to the sea bottom. But divers who go down to do maintenance on a wellhead's maze of pipes and valves have a difficult job. The water can be so murky that they can't see beyond an outstretched arm, which makes it gh to know just where to apply wrench and screwdriver. Engineers at British Gas PLC's Research & Technology divi- n in Killingworth, England, have come up with a solution: ort of electronic TV guide for underwater work. The surface w sends engineering drawings down via cable to a small eo display inside the diver's helmet. The helmet also has a eo camera to help the diver navigate the murky depths. at the camera sees is relayed topside, where the image is nputer-enhanced, then sent back to the helmet display. tish Gas is introducing the system for its divers and plans market it to others as well.

ITTING FLUID MECHANICS N MORE SOLID GROUND

oing their science on a supercomputer, researchers led by a team at Cornell University are challenging accepted dom about how to predict fluid turbulence. If their new ory holds up, it could affect the design of aircraft, racing hts, oil and water pipelines, and perhaps even cars.

Traditionally, engineers use eigenvalues—frequencies of os- ations—to predict when a stable system will become turbu- t. This technique works fine 90% of the time, explaining h things as how much a building will shake in an earth- ke. But for the other 10%, eigenvalues don't do the job, as- ts Lloyd N. "Nick" Trefethen, associate professor of comput- science at Cornell. For so-called fluid-mechanics problems, ew set of equations, dubbed "pseudospectrums," seem to dict more accurately when small perturbations will disrupt reviously smooth flow of liquid or gas. Trefethen believes s will point the way to piping systems that can handle ger flows and airplane wings that produce more lift.

IE PENTAGON LEADS A CHARGE OR COMPUTER-DISPLAY RESEARCH

lat-panel displays, already turning up by the tens of thou- sands in laptop computers, are high on everyone's list of technologies for the future. Trouble is, more than 95% of m are made in Japan. But the federal government hopes to nge that. On July 20, the Pentagon's Advanced Research jects Agency agreed to provide $20 million to launch the S. Display Consortium. The group will consist of flat-panel rtups, such as Photonics Imaging and Planar Systems, s would-be makers such as AT&T and Xerox, as well as display customers and suppliers of equipment for making flat screens.

USDC President Peter Mills says the consortium intends to learn from the mistakes made by Sematech Inc., the pioneering industry-government collaboration aimed at chipmaking technology. For example, by not building its own research plant, as Sematech did, USDC will save big bucks and perhaps get new technology into members' factories sooner. "With a collaborative effort, I'm convinced we can put a big dent in the Japanese lead," says Mills.

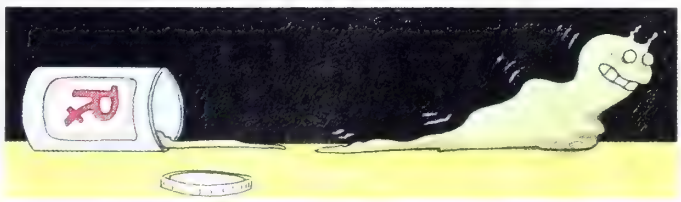
More help may be coming. At the request of the White House, the Pentagon is developing a larger plan to speed the rise of a flat-panel industry in the U. S. This plan, being spearheaded by Brookings Institution senior fellow Kenneth S. Flamm, could serve as a model for the overall industrial-policy approach of the Clinton Administration.

A BIOTECH FACTORY TO BREACH THE BLOOD-BRAIN BARRIER

The debilitating memory loss of Alzheimer's disease seems linked to a deficiency of a brain hormone called nerve growth factor (NGF), according to recent research at the University of California at Los Angeles. But the obvious solution—deliver more NGF to needy brain cells—isn't easy. The digestive system would destroy the hormone if taken orally, and it can't be injected because the brain has an effective sieve that blocks foreign agents in the blood.

To get around these defenses, scientists at Cytotherapeutics Inc. in Providence have developed a miniature biotech factory that's inserted directly into the brain. No bigger than a grain of rice, it's a capsule filled with thousands of cells that produce NGF. The capsule is made from a special plastic membrane that has been engineered to shield its cells from attack by the body's immune system, yet permit NGF to escape. Researchers headed by Cytotherapeutics' founding scientist, Dr. Patrick Aebischer, have tested the concept in rats and recently began experiments with primates.

WILL SLUG MUCUS HELP MAKE THE MEDICINE GO DOWN?



To most people, slugs are repulsive. No doubt that's why the remarkable properties of slug slime, or mucus, have gone unappreciated. Not by assistant professor of bioengineering Christopher Viney, a pioneer in unlocking the secrets of spider silk's amazing strength. His team at the University of Washington in Seattle is uncovering similar surprises in slime.

By coaxing slugs across microscope slides and inspecting their trails under polarized light, Viney has discovered that mucus has a liquid-crystalline structure. It's somewhat like that of spider silk, but with a unique property: When it reacts with water, the liquid crystals expand like an accordion, paving a wide, slick path for the slug. Viney believes the structure of the mucus can be harnessed for such applications as water-based lubricants and new drug-delivery systems that put medicinal coatings on specific sites in the body. In fact, a patent application covering drug delivery is now in the works.

PENSIONS

FOR A REAL BUDGET BUSTER...

Try the government pension gap, which stands at over $1 trillion

If President Clinton gets his way, Congress will soon pass an economic package designed to slash the federal budget deficit nearly in half, to about $180 billion, by 1997. But the projection ignores one of Washington's dirtiest secrets: If the government had to abide by corporate accounting standards for the lavish pension plans of federal workers, the sea of red ink would be one-third higher.

Companies are supposed to put money aside in reserves to provide for employees' future pension benefits. But the federal government, which operates on a pay-as-you-go basis, hasn't been accounting for retirement benefits as they are accrued by many of its workers. So as an aging federal work force edges toward retirement, two of the largest "trust funds" set up to cover 7 million civil-service and military employees are now underfunded by more than $1 trillion (chart). As a result, taxpayers are in for a future shock: By the year 2010, the funds needed to cover annual benefit payments are expected to nearly triple from current levels, to $160 billion.

The implications for taxpayers are ominous: huge tax increases or savage budget cuts down the road. "The pension liability is growing faster than funds are being set aside. This is money that will not be available for other uses in the future," says Dallas L. Salisbury, president of the Employee Benefit Research Institute, a public policy group.

For Washington, the irony is particularly acute. Policymakers have been hammering companies for years to shore up their pension plans. But the $51 billion in Corporate America's unfunded liabilities is dwarf by the federal government's own ful ing gap.

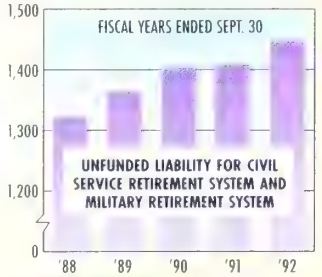
Washington isn't the only source such troubles. As states and cities gr ple with their own fiscal woes, more more of them have failed to build a quate reserves for future pension co mitments. The plans of 28 states underfunded by a total of $55 billi according to consultants Wilshire As ciates Inc. (table). The firm also cal lates that more than a dozen states h less than 75% of the assets they require to meet projected pension nee "Some states are definitely in poor nancial condition," says Jeanne Shearer, an associate with Wilshire.

PARITY PLUS. Experts believe that sta with troubled pension plans will forced to slash retiree benefits—so th may not get their full pensions—ra taxes, or use accounting gimmicks th only delay the day of reckoning. In 19 the Illinois legislature agreed to pu an average of $500 million a year seven years into five plans with unfu ed liabilities then totaling $8.2 billi But the legislators quickly fell behind fulfilling this pledge. And though R publican Governor Jim Edgar tried make up $55 million of an accumulat $295 million shortfall in contributio in June 1992 he raided $21 million of th pot to balance the state's operati budget.

West Virginia took a daring path th other states may have to follow. In fo years, Democratic Governor Gaston C perton has pushed through $500 milli in tax hikes, a third of which will used this year to rebuild the state's tro bled teachers' pension plan. As recen as 1987, West Virginia had contribut only $16 million toward worker reti ment. "This governor has made a co certed effort to fund the system," sa James L. Sims, the fund's executive se retary. "Maybe this is one time We Virginia is ahead of the game."

The federal government seems unli ly to follow West Virginia's lead anyti soon. In 1986, fede agencies were quired to begin cre ing reserves for pe sion benefits accru by workers hired aft that date. But t money in such spec accounts, like ca held in the Social Se rity trust fund, merely an accounti convention—the fun can be used for oth purposes. Essentia

UNCLE SAM'S UNFUNDED PENSION TAB



DATA: EMPLOYEE BENEFIT RESEARCH INSTITUTE

ILLUSTRATION BY RALF SCHMITZER; CHART BY LISA HOUSE BRAMMER, BW

eds—and the states—simply cover current pension obligations with eceipts.

t as pension outlays grow, the feds be forced to take stronger action. given public support for paring the t, when the big payments come tax increases or program cutbacks kely. The first target may well be ension plans themselves, which are more generous than those provid- the private sector. Federal work- for instance, are guaranteed an- cost-of-living adjustments (COLAs). private-sector workers aren't ised COLAs, though some employers

WHERE STATE PENSION HEADACHES LOOM

	Percent funded*	Shortfall Billions
ST VIRGINIA	33%	$ 2.1
AINE	48	1.7
ASSACHUSETTS	55	6.3
UISIANA	59	5.2
LAHOMA	60	2.6
DIANA	65	2.3
NNECTICUT	69	3.7
NOIS	71	5.6
CHIGAN	75	7.1

sets as a percentage of liabilities, for pro- ed benefit obligations

DATA: WILSHIRE ASSOCIATES INC

ake periodic inflation adjustments. shington is cautiously starting to some of the pension fat. To meet n's deficit-reduction targets, Con- agreed to delay the next cost-of- increase for federal civil-service es by three months—a seemingly uous move that will trim benefits billion over the next five years. al workers, predictably, aren't hap- it's unfair for Congress to continue ker with the retirement system. oyees ought to know what they're to get from investing in a career leral government," says Robert M. s, president of the National Trea- Employees Union.

wmakers themselves may have l feelings about reforms that could reduce benefits and raise questions generous congressional pensions. provide average lifetime payments million to each retired U. S. Sena- nd $1.5 million to former members ngress. When it comes to paying ab for lavish government pensions, ag-holders will likely be the next ation of taxpayers.

Dean Foust in Washington, with Greising in Chicago

BANKING

A SOUTHERN BELLE NOT LOOKING FOR SUITORS

Barnett Bank is Florida's biggest, and takeover rumors abound

Florida brings to mind palm trees and pelicans more than it does banking powerhouses. But drive through almost any town in the Sunshine State, and you're likely to see a green-and-white Barnett Bank sign in front of a branch office. Barnett Banks Inc. is preeminent in Florida, and it aims to keep on growing.

Chairman and CEO Charles E. Rice, 57, the architect of Barnett's expansion over the past decade, ought to be sitting pretty. Instead, he must contend with periodic rumors that his bank could be an acquisition target. With its dominance of the most attractive banking market in the country—Florida gets more than 750 new residents every day, many of them with hefty retirement caches—Barnett exemplifies the banks that bigger companies will want to swallow up as the industry consolidates.

BARRIERS, FOR NOW. Barnett doesn't need to worry right now. Two of its regional rivals, First Union Corp. and NationsBank Corp., both in Charlotte, N. C., are busy digesting a spate of recent acquisitions. And Atlanta's SunTrust Banks Inc. as well as Wachovia Corp. in Winston-Salem, N. C., Barnett's other big neighbors, appear unlikely so far to wage unfriendly takeover battles. Also, legislation passed in nine Southeastern states and the District of Columbia has created a pact barring predators from elsewhere. But already, North Carolina's legislature has voted to modify the multistate treaty to allow for full nationwide banking in 1996. Congress could lower barriers even sooner.

It's ironic that Barnett—whose growth has come largely through making acquisitions—now finds itself as a potential target. Ten years ago, it had $9.4 billion in assets and 14.4% of all deposits in the state of Florida. Today, however, it boasts $37 billion in assets and a 27% share of deposits.

Barnett is also building on an extremely powerful franchise. It has charged off many troubled real estate loans—they now account for 17% of the portfolio, down from 28% in 1988—and the bank is concentrating on small and midsize business customers. It's also hawking more products in its 637 retail outposts, capitalizing in part on heavy use of bank branches by older customers. Barnett has banking relationships with 43% of the elderly with incomes over $35,000, and with 40% of the state's households. Barnett's second-quarter earnings—$104 million—set a record.

Barnett's near lock on its market may be tempting to would-be buyers, but the prospect of suitors doesn't faze Rice. "I don't dwell on it," he says. He and President Allen L. Lastinger Jr. believe that Barnett is best off independent. They vow to keep earnings growing, a move that should keep the stock high enough to deter buyers. Says Lastinger: "I can tell you the price is not going to be cheap."

Right now, though, Barnett's stock is trading at 1.8 times the company's book value, only slightly higher than other regional bank stocks—good news, perhaps, for acquisition-hungry bankers.

By Gail DeGeorge in Jacksonville, Fla.

RICE (LEFT) AND LASTINGER AIM TO KEEP THE STOCK UP TO DETER BUYERS

MARK M. LAWRENCE

ISRAELI STOCKS: DON'T HEAD FOR THE BUNKERS

Despite slower growth and Scitex' fall, the bull run isn't over

For Arie Nessim, head of the capital markets division at Israel's Bank Leumi, the sleepless nights began on July 15, when Scitex Corp., the jewel of Israel's high-tech industry, jolted investors by announcing that second-quarter earnings would be about one-third lower than expected. Scitex' stock, which trades only in New York, fell nearly $10, to 28⅜. The bombshell triggered a sell-off of other Israeli stocks—in Tel Aviv as well as New York.

And if that wasn't enough to keep Nessim awake, his bank's new, highly promoted mutual fund, Psagot, or "a view to peace," was launched just days before Israeli forces clashed with guerrillas in southern Lebanon in some of the of the heaviest fighting on that front in more than a decade. "That's hardly an auspicious welcome for a peace-based fund," he says with a sigh. The fund raised 170 million shekels, or $60 million, to invest in companies that are expected to benefit from peace in the Middle East.

The developments at Scitex and along the Lebanese border are giving investors in Israeli securities a lot of bad nights. After all, markets don't rally forever, and the last couple of years have been one big bull run for the Israelis. The Mishtanim Index, a measure of stock prices, more than tripled, and in 1992 alone, the number of companies on the Tel Aviv Stock Exchange grew by 30% as annual dollar value of trading volume rose to $15 billion.

BOTTOM-FISHING. Nevertheless, the bull market isn't over. Indeed, some market analysts argue that this pullback should not have surprised anyone. "After two years of such phenomenal growth, a technical correction was bound to come," says Zeev Holtzman, director of Giza Ltd., a Tel Aviv investment bank.

Even before the slide, the Israeli market seemed to be losing its oomph. Prices stopped their hard-charging climb in early 1993 and remained little changed until recently. The U.S.-traded stocks have been hit even harder, since most are small over-the-counter issues that have suffered along with the rest of the technology stocks. Better-known names such as Elbit Ltd. and Lannet Data Communications Ltd. have been especially hurt: Like Scitex, they are trading barely above their 52-week lows (table).

But it was Scitex' forecast shortfall—blamed on poor sales growth in Europe and pricing pressures in the U.S.—that jarred investors most. Perhaps the highest-profile Israeli stock outside of the country, Scitex has made a lot of money for investors. The stock, which stood at less than 3 five years ago and near 40 on July 1, goes for 25 now.

U.S. analysts who follow the stock have slashed their earnings forecasts, but not all have turned bearish. Lior Bregman of Oppenheimer & Co., for example, cut his Scitex forecast by 20%. But Bregman still thinks the company, which makes state-of-the-art computerized imaging and printing equipment, will earn $2.65 a share in 1993 and $3 in 1994. If he's right, the stock is a steal.

Some big investors are already trying to bottom-fish Israeli stocks. A group led by PEC Israel Economic Corp., a U.S. holding company that invests in Israel, just bought 533,000 Scitex shares, raising its stake to 23.2%, or 9.89 million shares. Emilio Bassini, a managing director of BEA Associates, which manages the First Israel Fund, thinks the market slump great buying opportunity because st have been beaten up "unnecessar Bassini says that Israel's high-qu educational system, relatively wages, and the influx of engineerin ent from the former Soviet Union vide a competitive edge for high companies in particular.

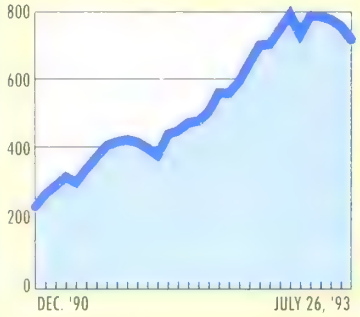
HELPING HAND. Of course, the slum Tel Aviv also reflects a slowing in Israeli economy—down this year to to 4.5% rate of gain from 1992's ro 6.6%. But on July 24, the Israeli go ment announced several measures analysts believe will help the econo and in turn, the stock market. One 2% devaluation of the shekel that sh give a little boost to exports. And set of measures, the elimination of tier currency exchange rates and cancellation of import-tax surcha should promote more competition in economy and help to keep prices— inflation—in check. Last year, infla was only 9.4%, the lowest level 1968, and this year, the rate is a 10%. The government hopes to driv flation below 8% in 1994.

The government's recent m should also allow interest rates, above 11%, to fall to near 10%. "With few weeks, interest rates are expe to come down, and this will no d have an extremely desirable impac stocks," says Avi Harel, manage Bank Hapoalim's Securities & Dep Div. In fact, the Tel Aviv stock ma started to move up the day after announcement, but the rally snuffed out by the news from Leba

The tense military situation and ile peace negotiations may make s investors skittish about buying Is stocks. But remember, this bull ma got started when Saddam Hussein lobbing Scud missiles, and gas m were the required dress of the day.

By Neal Sandler in Jerus

ISRAEL'S BULL MARKET STARTS TO SPUTTER...



DATA: BANK LEUMI, BRIDGE INFORMATION SYSTEMS INC., BW

...WHILE ISRAELI STOCKS TRADED IN THE U.S. STUMBLE

COMPANY Business	July 27 price	52-week high/lo
ECI TELECOM Telecommunications equipment	33 ½	44 ¾-2
ELBIT Military electronics, medical equipment	35 ½	54-3
LANNET DATA COMMUNICATIONS Data communications equipment	11 ¼	32 ¼-1
SCITEX Computerized imaging, printing	25	44 ⅜-2
TADIRAN Telecom, defense & consumer products	28 ½	36 ¾-
TEVA PHARMACEUTICAL INDUSTRIES Drugmaker with large U.S. operation	21 ½	25 ½-

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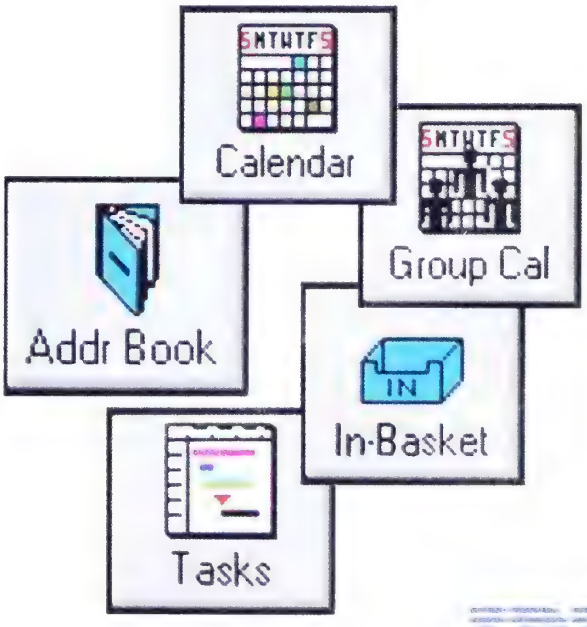

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WHY INSURERS ARE SPLASHING ACROSS THE RIO GRANDE

Mexico remains one of the most underinsured major countries

How much does the average American spend on insurance? $1,930. What about the average Mexican? $31.

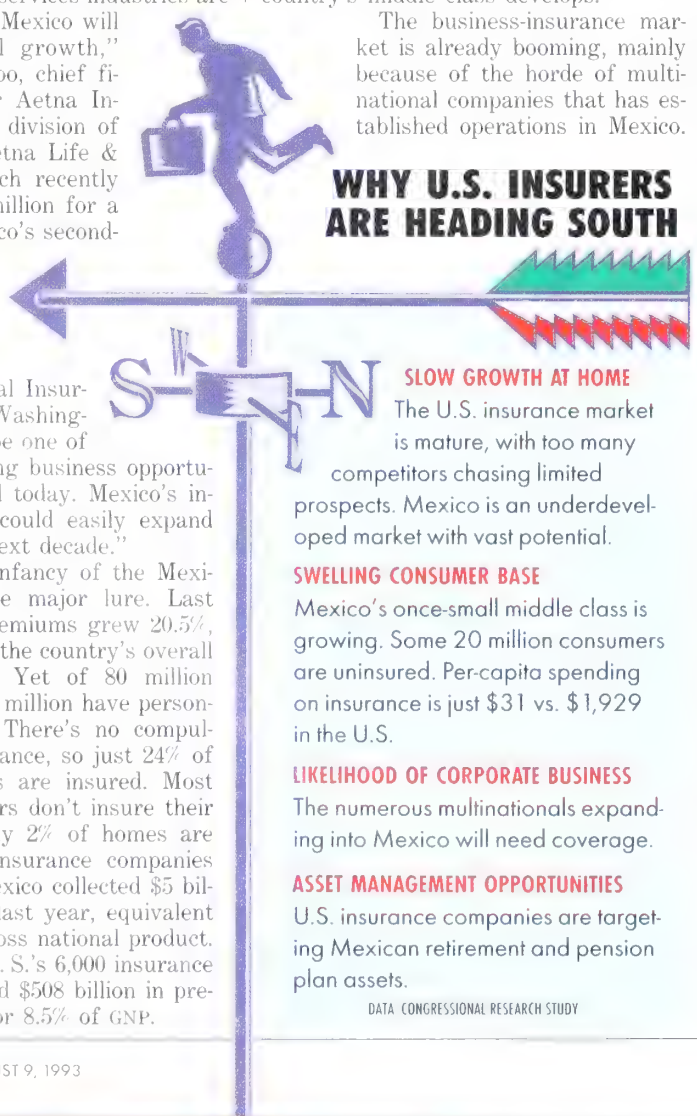
That graphic disparity is quickening the blood of a lot of insurance executives in the U. S. and Europe. Despite Mexico's dramatic economic growth over the past decade, it remains one of the most underinsured major countries in the world.

More than a dozen major foreign insurers and insurance brokers have set up operations, mostly joint ventures, in Mexico—and the list is likely to lengthen rapidly. U. S. insurers, facing a mature market and intense price competition at home, are especially eager. "The insurance and financial-services industries are about to take off. Mexico will offer phenomenal growth," says Raph Appadoo, chief financial officer for Aetna International Inc., a division of Hartford-based Aetna Life & Casualty Co., which recently shelled out $100 million for a 30% share of Mexico's second-largest insurance company, Seguros Monterrey. Adds Gordon Cloney, president of the International Insurance Council in Washington: "This has to be one of the most interesting business opportunities in the world today. Mexico's insurance business could easily expand tenfold over the next decade."

WINGING IT. The infancy of the Mexican market is the major lure. Last year, insurance premiums grew 20.5%, nearly eight times the country's overall economic growth. Yet of 80 million Mexicans, only 1.5 million have personal life insurance. There's no compulsory liability insurance, so just 24% of the country's cars are insured. Most doctors and lawyers don't insure their practices. And only 2% of homes are insured. The 42 insurance companies that operate in Mexico collected $5 billion in premiums last year, equivalent to 1.55% of the gross national product. By contrast, the U. S.'s 6,000 insurance companies collected $508 billion in premiums last year, or 8.5% of GNP.

One big reason for the disparity: years of high, savings-devouring inflation, which have made Mexicans more concerned with making it day-to-day than planning for the future. When an earthquake destroyed much of downtown Mexico City in 1985, only 15% of the buildings were insured. "There was no insurance culture at all. After taking care of food, clothes, and shelter, people had no money left over," says Antonio Pozzi Pardo, assistant general manager of Seguros América, Mexico's third-largest insurer. Foreign insurers are betting that as inflation drops—it now stands at 10% a year— and as the economy grows, Mexicans can be pursuaded to develop a taste for insurance, especially as the country's middle class develops.

The business-insurance market is already booming, mainly because of the horde of multinational companies that has established operations in Mexico.



Jack R. Perez, chief executive of in ance broker Alexander & Alexander vices Inc.'s Latin America/Caribbea vision, sees excellent growth potenti coverage of the "large construc risks" that Mexico faces as it build the country's highways, bridges, electricity-generating facilities. On 13, the insurer agreed to acquire an interest in Asesores Kennedy Agent Seguros, a Mexican broker that has cialized in *maquiladora* industries a the U. S. border.

STAMPEDE? The North American Trade Agreement, which would link U. S., Canadian, and Mexican econon could stimulate growth even more. der the pact, which will take effec Jan. 1 if Congress approves it, Me would allow American and Cana companies to raise their stake in M can insurers to 100% by 1996. Cl estimates that over the next dec American insurers could grab a share of the Mexican insurance mar which is projected to total $50 bi within 10 to 15 years.

Metropolitan Life Insurance Co. h good start. After acquiring a 49% st in Seguros Génesis with Spain's B Santander last year, the company be aggressively marketing life and bene policies. It not only undercuts comp tors' prices but has shaken up the ket by offering such novelties as a free customer-service number an refund of the deductible if claims are paid within five days. "So far, our st egy of distinguishing ourselves by quality of service is working," says keting director Thaddeus O. B Founded in 1991, Seguros Génesis quickly become Mexico's ninth-larg life-policy issuer.

U. S. insurers also should benefit f Mexico's partial privatization of its so security system, which is allowing in ance companies for the first time to fer pension plans to supplement s coverage. "As the pension market de ops, we certainly would hope to hav share of it," says William G. Poortv head of MetLife's international and tirement-savings operations.

Some analysts wonder if foreign surers' euphoria is overblown. Few M icans can afford to invest in insura once they've bought a house or Pardo says Mexico has yet "to devel culture in which insurance is conside indispensable." Plowing big money the Mexican market certainly has risks. But most insurers don't wan take an even bigger risk: being left hind in competing for what could come one of the world's most lucra insurance plays.

By Geri Smith in Mexico City, M Suzanne Woolley in New York and C Roush in Hartford

GENE G. MARCIAL

OT DOGS STALE? OT AT ATHAN'S FAMOUS

Nathan's hot dogs are as native to New York as the Yankees. And when the 77-year-old Na-n's Famous went public on Feb. 26, shares sold as fast as weiners in ankee Stadium. The stock shot up to rly 11 that day from the initial price . "It was a hot offering for a com-y in a business that has somewhat ed," notes one South Carolina in-ment manager.

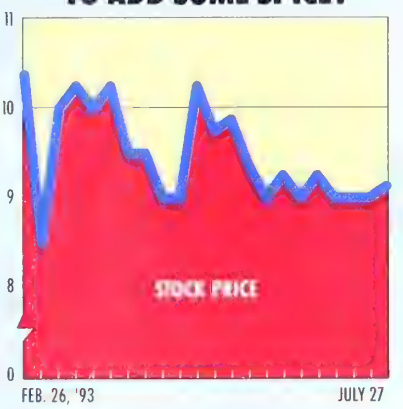
ndeed, national sales of hot dogs e been in a slump, partly because he public's move away from fatty ls. Yet sales at Nathan's 141 fast-d outlets, located mainly in the theast, have been growing robust-"Nathan's secret lies in its premi-all-beef hot dogs and the way the management, led by CEO and Pres-t Wayne Norbitz, has kept sales wth and profit margins way ahead ivals," says veteran restaurant ana- Roger Lipton. He notes, for in-ce, that average sales at Nathan's e A" eateries—with 400 sq. ft. to 0 sq. ft.—total $844 per sq. ft., pared with sales of $350 and $417 sq. ft. at Au Bon Pain and Sbarro, ectively. Lipton figures that the of goods and labor are 51% to 53% sales. "Combining that with Na-n's low occupancy expenses pro-es attractive profits," he notes.

or these reasons, Nathan's shares, at 9⅛, are as much of a bargain ts hot dogs, which sell for $1.69 to 5, says Lipton. Revenues, up to ly $22 million in the year ended . 31, 1993, from $20 million in fiscal , should hit $29 million next year.

BUNNIES. Lipton expects Nathan's row even faster in the years ahead s strategy of putting up franchises nalls, airports, travel plazas, and artment stores picks up speed. Mar-, which already operates 15 Na-n's eateries on highway travel pla- and 9 others at airports, is racted to open a total of 90 Na-n's units. Caldor, another franchi- operates 32 Nathan's at its stores is expected to open 25 more by ch of next year, Lipton says.

ompared with other restaurant ks, Nathan's has a low price-earn- ratio. Cracker Barrel trades at a of 32 based on estimated 1994 earnings, and Outback Steakhouse has a p-e of 25. Nathan's is 16, based on Lipton's estimate of 56¢ for the year ended Mar. 31, 1994 vs. 1993's 34¢. For 1995, the analyst expects earnings of 90¢ a share. He sees the stock more than doubling in two years.

NATHAN'S: READY TO ADD SOME SPICE?



DATA: BRIDGE INFORMATION SYSTEMS INC

HOSPITAL SERVICES FOR STAY-AT-HOMES

Savvy Sy Goldblatt usually keeps mum about his investments, but this is an exception: "Never in my 18 years in this business have I bought more than a 5% interest, but here I am now owning more than 19% in Staff Builders," says Goldblatt, who heads the New York investment firm S Squared Technology. What's so special about Staff Builders, the nation's third-largest home health-care provider?

"For one thing, it's a very undervalued company in a business that's rapidly widening," says Goldblatt. Now trading at 3, the stock is cheap, he adds, because its market capitalization of just $48 million is dwarfed by revenues that are expected to hit $225 million next year. Revenues totaled $198.6 million in the year ended Feb. 28, 1993, with a profit of 14¢ a share this fiscal year, vs. a loss in 1992. Next year, Goldblatt expects profit of 25¢ a share. "This stock will be a huge winner in a couple of years," he says.

Another astute pro, John Westergaard, agrees. He sees Staff Builders growing at a 15% to 20% clip annually over the next five years, largely because of the huge potential in home health care. That market, he says, is being driven by the growing numbers of senior citizens. Plus, the national cry to cut health-care costs favors Staff Builders, he adds.

In addition to basic health-care services, the company provides chemotherapy, blood transfusions, and dialysis, attending to some 9,000 patients daily. And Westergaard thinks the rapid spread of AIDS has further increased demand for these types of home care.

Based on the multiples that other home health-care stocks sell for, Westergaard says Staff Builders should trade at 4½. Analysts Alan Roneses and Stuart Linde of Fahnestock figure the stock will rise to 5 this year and climb as high as 13 in four years.

DEBT-FREE, CASH-RICH NEW JERSEY STEEL

Remember the infrastructure plays that were supposed to hit the skies once the Clinton Administration's program of rebuilding roads and bridges got off the ground? Most investors have tired of waiting for the Clinton plan and have quietly dumped the infrastructure idea. That's one reason why New Jersey Steel has been on the ropes. Moreover, the Sayreville (N. J.) company, which operates a low-cost minimill that recycles scrap into reinforcing steel bars, posted a 20¢-a-share loss in the first quarter vs. earnings of 7¢ a year ago.

But as the stock has melted to 14 from 18 in early March, some value players have snapped it up—including portfolio manager Scott Black, who has accumulated some 4%. Here's why Black likes the stock:

New Jersey Steel has a clean balance sheet and almost no debt, with the stock trading at about book value—$15 a share. The company also has some $8 million in cash, or $1.50 a share. That's not all. Black, president of Delphi Management, sees the 25¢-a-share earnings he expects this year jumping to $1.50 in the year ending Nov. 30, 1994, and to $3 in 1995.

Black notes that a rise in scrap prices crimped the company's first-quarter results. But he sees those prices abating soon, and with New Jersey Steel continuing to raise the price of its reinforcing bars, Black figures earnings will propel the stock to 30 in two years. The recent U. S. International Trade Commission ruling that imports don't injure domestic steel producers has no effect on New Jersey Steel, says Black, because its reinforcing steel doesn't compete with imports.

COMPUTERS

APPLE'S UNCERTAIN HARVEST

Lacking new wares with the Mac's potential, it faces a dry season

Apple Computer Inc. badly needs some good news and hopes to generate a lot of it on Aug. 2, when it launches its much delayed "personal digital assistant," the Newton MessagePad. Apple is counting on the MessagePad to reassert the company's identity as a technology leader—and help critics and investors forget for a moment the problems in the core personal-computer business. To get the happy news out, the company is furiously booking interviews for Chairman John Sculley with every major newspaper, magazine, and talk show—including MTV.

Back at headquarters in Cupertino, Calif., however, the MessagePad blitz is not likely to raise morale for long. The shock of a record $188.3 million quarterly loss and pink slips for 2,100 colleagues, with another 400 expected in coming months, has made employees apprehensive about the company's future and their own. The latest bit of gallows humor on Apple's computer networks is a screen-saver program that pops up when computers aren't in use showing the killer dinosaur from *Jurassic Park*. Only, in Cupertino cubicles, the title reads "Jurapple Park."

BASTIAENS WITH A NEWTON MESSAGEPAD: ANALYSTS ARE PREDICTING LIMITED SALES

The message isn't subtle: Apple is being trampled in the marketplace in a Darwinian struggle for survival in its existing business. The company is in the worst shape since 1985, when it encountered slow sales, wrenching changes, and the ouster of co-founder Steven P. Jobs. For the June quarter, revenue growth was in the single digits, and even before the $320.9 million restructuring charge, weak Mac sales plunged operating income to $14 million, from $201 million a year before. Apple's s hovers around $26, less than half wl was in early June. As in 1985, the b has put a new man in charge.

There's a big difference, howe Back then, when Sculley took co from Jobs, he staged a stunning tr around using the Macintosh. The re tionary, "user-friendly" Mac had l introduced in January, 1984, but s had been slow. Sculley figured out to sell Macs by the millions. Nine y later, however, "the Mac isn't unbe ably better anymore," says Willia Tauscher, chief executive of Compu Land Corp. Now, there are 26 mi PCs running Microsoft Corp.'s Win and looking for all the world like M

UNKNOWN MARKET. This time, Michael H. Spindler doesn't have s thing as dazzling as the Mac up sleeve. Sculley insists that Newton brainchild, "can be potentially as im tant to Apple as the Macintosh been." But other computer execut doubt he'll be around to see it: T expect Sculley to leave the company tirely by yearend.

Even if Sculley remains as chair nobody at Apple is betting the far Newton, at least any time soon. MessagePad shipping in August short of what analysts had once exp ed. For example, instead of wire communications, the initial version only be able to send electronic-mail sages via an external modem. More the market for such a device is still known, and with prices ranging $699 to $899, sales aren't likely to off quickly. Says Gaston Bastiaens, president of the Personal Interac Electronics Div. that will sell sagePads: "I am very confident of cess. I have no doubts. The one thi can't say is how big and how fast it happen."

Most analysts predict sales of 150,000 Newtons the first year, gene ing a mere $75 million to $100 millio Apple's projected $8.9 billion in r nues for fiscal 1994. "In Apple's sch of things, it's peanuts," says Tim B in, president of market researcher C tive Strategies Research Internatio

Still, Newton and other products take Apple beyond the PC business key to Spindler's long-term strat The new businesses will include cons er electronics, services, software, servers—powerful PCs that can co networks. Together, all these busine will contribute about 10% of Apple's enues in fiscal 1994, Apple execut told analysts at a July 20 meet Equally important, says Spindler, " we will have these businesses stan

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their own feet, financing themselves."

In other words, Bastiaens and the other Apple execs pursuing new markets can no longer count on Mac profits to fund their efforts. For good reason: Because Apple is now duking it out with IBM and all the clone makers, there won't be much money to throw around. Even after slashing operating expenses by 15% in July, Apple is still likely to post a $3 million loss in the current quarter, says analyst Eugene Glazer of Dean Witter Discover & Co. He and other analysts expect a return to "modest" profitability in December but don't foresee a return to Apple's old profit levels. Says analyst Marianne R. Wolk of Prudential Securities Inc.: "I don't see Apple going out of business. But it's going to be a rough battle for the next year."

Price cuts on desktop Macs and laptop PowerBooks in June have boosted demand. But to break even after the cuts—which ran as high as 35%—Apple must increase shipments at a 20% to 25% annual rate. Gross margins have already dropped from 45% two years ago to 32.5%. Insiders expect more price cuts in the fall, and analysts figure gross margins could hit 25% by yearend.

SIMPLER LINEUP. Simply to survive in this new environment, Spindler must keep cutting costs and streamlining the Mac business (table). Spindler is cutting quarterly operating expenses to about $500 million, down from $600 million.

Apple execs also hope to save money and boost Mac sales by simplifying the Mac lineup. Last year, Apple introduced more models than it had in the preceding three years. There are now six different Mac families: Performa, PowerBook, Classic, LC, Centris, and Quadra. That has not only added to internal overhead but also has confused distributors and buyers. Says Joe Popper, president of the Computer Gallery store in Cathedral City, Calif.: "Apple customers walk in the door and don't know which model they want anymore." Joseph A. Graziano, Apple's chief financial officer, says the Mac line will be scaled down, but he won't elaborate. Insiders say the Classic and Centris lines are likely to go.

That's the simple part. The harder job—some say the impossible dream—is to once again put technological distance between the Mac and the PC crowd. It's becoming harder to wring big improvements out of the Mac design. The newest Macs, the Centris 660av and the Quadra 840av, due out on July 29, will have special circuitry and a software program called Casper to recognize simple spoken commands such as "open file." It's impressive, but not the type of innovation to spur major sales. "Are they dramatic steps forward? No. Are they enough to boost Apple? No," says Bruce Lupatkin of Hambrecht & Quist Inc.

The technology that might give the Mac a real boost won't come until next February. That's when, insiders say, the company will bring out the first Macs to use the PowerPC chip. The product of a partnership between Apple, IBM, and Motorola, the PowerPC runs twice as fast as the microprocessors in today's fastest Macs. The plan is to shift the entire Mac line to the PowerPC chip.

But even the PowerPC chip may give Apple much of an edge. By winter, dozens of PC makers will be ping computers based on Intel's su fast Pentium chip, which is on a formance par with the PowerPC runs a new Microsoft operating sys called Windows NT. Worse, moving one hardware architecture to anothe risky business: Unless the new mach run existing Mac software perfectly, tomers are likely to jump ship. cedes Graziano: "PowerPC is g to be a big transition to manag

SMART PHONES. While it makes transition to the PowerPC, A is also expected to begin a profound shift: building up ware and other businesses will help it survive shrin hardware profits. Claris, the sidiary that makes and mar applications programs, has one of the few bright spots Apple this year and was sp layoffs. In June, Apple cre another software division. company also is cutting d to license Newton techr gy: Five hardware mal will pay licensing fee build Newton clones other products. Appl talking to phone compa interested in using Nev technology in "sn phones." By seeding market now, Apple ures it will profit by selling Newton ware to these con nies. In addition, A is selling program help create Newton plications progr and is negotiating royalties on every plication that's s Insiders say Spindler may the Newton m for the rest of ple's business. When the PowerPC Macs arrive next year, company is expected to announce p to license its software to other comp companies that adopt the new chip. ple executives aren't talking publ but insiders say it already is shop the idea around. "This will dead-on pen in 1994," says one Apple execut

Every little bit will help. Until he gins to see some results from New and other new products, Spindler n seek profits wherever he can—just those other PC makers in Jurapple P

By Kathy Rebello in Cupertino, Ca and Peter Burrows in Dallas

To: Mike Spindler
From: Investors
RE: 12-month plan

1. Lower Macintosh prices further, keeping pace with Compaq, Dell, and IBM. Gross margins will likely fall from 32.5% now to about 25% by yearend.
2. Keep cutting costs. May need to take a close look at R&D spending, now three times that of competitors.
3. Stick to Mac-knitting for the next year, until new products such as Newton can boost revenues. Postpone the drive into new businesses and joint ventures.
4. Streamline Mac product line, paring six lines to no more than four. One likely candidate for elimination: The Mac Classic.
5. Look to high-margin areas of growth for the future, such as licensing the Mac software.

UCT LIABILITY

N INVINCIBLE SHIELD FOR EDICAL MANUFACTURERS

courts may ban lawsuits over devices approved by the FDA

ane King thought she had a solid case against Collagen Corp., makers of a wrinkle-softening treatment l Zyderm. In 1987, a plastic sur- injected King with a test dose of rm to remove two lines around her h. Soon after, the then 35-year-old ess from Salem, Mass., came down an incurable disease that causes mmune system to attack skin and le tissues. She sued gen—as have several women—for knowing- arketing an unsafe uct. But King lost— gh whether Zyderm nsafe or not had noth- o do with it.

January, a federal ap- court in Massachu- threw out her case, that Congress intend- e Food & Drug Ad- stration—not judges uries—to be the final rity on the safety and cy of medical devices as Zyderm. The King ion and a similar case ing Collagen, if upheld the U. S. Supreme t, will drastically alter gal rights of the more 11 million Americans medical devices that jected or implanted in ody, including heart s, pacemakers, and ar- l joints. The ruling does not apply ugs.

IMPACT. The judges' decisions l bar consumers from suing compa- whose products have the FDA's arket stamp of approval—even in where design or manufacturing are detected. One ruling states suits would be banned in the event aud. Such instances would only be to criminal prosecution, since con- rs could not sue the FDA. "To think fraud and misrepresentation can be led by this law is mind-boggling," King's lawyer, Susan Allinger.

e two Collagen decisions are al- beginning to have impact. The issue was raised recently by Shiley Inc. in a case brought by 300 recipients of its FDA-sanctioned heart valve. Although a California appeals court ruled on July 22 that the King decision did not warrant dismissal of the case, Shiley will undoubtedly continue to press the point. Had the King ruling been around last year, the company's $500 million settlement with other heart-valve customers might never have occurred. Indeed, the legal and economic impact of the courts' decisions could be staggering, with hundreds of cases pending nationwide involving everything from optical implants to hip prostheses.

Jane King contends she contracted an incurable disease from a wrinkle-softening treatment. An appellate court ruled her suit had no standing.

For medical-device makers, the Collagen cases offer the first relief after years of rising legal costs. "We spend millions proving to ourselves and the FDA that our products are safe and effective long before they go into commercial use," says David Foster, Collagen's chief financial officer. "The argument we've tried to use is that review by the FDA ought to be worth something."

The FDA's review is certainly arduous. The agency requires manufacturers to submit reams of clinical and safety testing data, explanations of how their devices will be produced, and proposals on warning labels. Now, manufacturers contend that freedom from the threat of litigation will result in lower prices for consumers as well as more innovation.

NOT INFALLIBLE. The companies are also cheering legislative efforts to limit their liability or to keep them out of court altogether. Industry groups are pressing Congress to adopt a uniform liability standard because they say having different laws in every state is unfair. Their complaints have already led five states to pass statutes that shield from punitive damages companies whose devices have FDA approval, except in instances of fraud or bribery. A national version of the law is before Congress.

These measures are by no means a sure thing. First they will have to get past such lawmakers as Representative John Dingell (D-Mich.), who is dubious about the merits of transforming the FDA into an insurance policy for manufacturers. The King ruling "is a strained reading of current law and doesn't appear to be what Congress had intended," Dingell says. His reluctance to give the FDA exclusive authority over medical devices stems from a report he issued in May blasting the agency for inadequately assessing the safety of these products. Dingell's stance is buttressed by some notable agency lapses, such as the FDA's failure to detect flaws in silicone breast implants. The FDA declined to comment for this story.

Organizations such as the Association of Trial Lawyers of America say they are simply fighting for consumer's rights. "It's unfair that you could have a device that's truly defective and harmful, but as long as it has the FDA's approval, recipients would never be able to do anything about it," says plaintiff's lawyer Neal Shapero.

It's clear that makers of medical devices and manufacturers of other products have been stung by ever-increasing legal burdens. The question is whether turning the FDA into a shield against consumer action is the best or fairest way to solve the problem.

By Linda Himelstein in New York

RICHARD E. SCHULTZ

STRATEGIES

JACOB AND MARCUS MUST COPE WITH DEBT, CHANGING MARKETS, AND TOUGHER RIVALS

THE WALLENBERGS' TROUBLED EMPIRE

The next generation may be forced to sell more assets

Each May 29, Peter Wallenberg, the patriarch of Sweden's most famous industrial family, gathers 100 or so relatives to celebrate his birthday and that of his late grandmother, both on the same date. This year as usual, guests reveled at the old Wallenberg family estate, Täcka Udden, a lovely cream-colored, turreted mansion overlooking Stockholm's archipelago.

But something was different: At least one relative was struck by the ease and self-confidence with which two members of the fifth generation of Wallenbergs worked the crowd. "These guys stood out," the relative says, referring to Jacob, who is Peter's son, and Marcus, who is Peter's nephew. "Suddenly, I had the feeling these guys could stand up to Peter and say, 'No.'"

Jacob, 37, and Marcus, 36, are marked men. They are preparing to shoulder the enormous burdens of running an extraordinary business empire—one that's now under considerable strain. Through a network of shareholdings held by family foundations, the Wallenbergs directly control or influence companies worth $33 billion, a staggering 40% of the total Stockholm market. They include some of Sweden's biggest multinationals, from Ericsson in telecommunications and Electrolux in appliances to Astra in pharmaceuticals and Saab-Scania in cars, trucks, and aircraft (table).

OVEREXTENDED. The changing of the guard comes at a crucial time. For decades, the Wallenbergs have persevered—and prospered—with a formula that mixed family members with professional managers, patient investment, and a commitment to international expansion. Now, the Wallenbergs find themselves overextended as profits weaken, debts mount a[illegible] competition intensifies.

Half-measures, suc[illegible] partial spin-offs and fin[illegible] gimmicks, may buy [illegible] time but won't solve [illegible] problems. Analysts sa[illegible] family just doesn't hav[illegible] cess to the huge amou[illegible] capital required to kee[illegible] Ericsson fully compet[illegible] with American Telepho[illegible] Telegraph or a Saab-S[illegible] competitive in the g[illegible] auto and truck busi[illegible] Even Skandinaviska En[illegible] Banken, Sweden's la[illegible] bank and a onetime r[illegible] source of funding fo[illegible] Wallenbergs, is now pla[illegible] by bad loans and is in[illegible] perate need of new cap[illegible]

By all accounts, the [illegible] white-haired Peter, no[illegible] still calls the key shots[illegible] he is turning over mor[illegible] sponsibility to Jacob [illegible] Marcus. The main que[illegible] is whether they are re[illegible] Although both have ba[illegible] and industrial experi[illegible] neither has operated a[illegible] business. Now, in a much toughe[illegible] mate, they will have to referee clai[illegible] capital and the family holdings. One[illegible] who knows them both wonders "if [illegible] can take the pressure."

To save their empire, the Wallen[illegible] will have to reduce it. By concen[illegible] ing their firepower, they will cert[illegible] be able to maintain their grip on a[illegible] key companies. But others will prob[illegible] have to be sold, merged, or linked [illegible] new partners around the world. [illegible] the consolidation already appears u[illegible] way. In June, the Wallenbergs r[illegible] $376 million dollars by selling restr[illegible] shares in Sweden's Asea to institut[illegible] And in early July, the Wallenbergs [illegible] their 7.5% stake in Christies Int[illegible] tional PLC for $35 million.

Both young men have recently t[illegible] on tough assignments. Jacob has a[illegible] role in efforts to revive S-E Ban[illegible] which suffered a $692 million oper[illegible] loss last year, largely because of [illegible] real estate loans. Nonperforming [illegible] rose to 7.9% of the total. The W[illegible] bergs hold a 7.7% stake in the b[illegible] and Peter is its senior vice-chairma[illegible]

Marcus has been working his wa[illegible] through different branches of the [illegible] pire. After a three-year stint ma[illegible] ing newsprint for the Düsseldorf-b[illegible] Stora Feldmühle, he is moving to e[illegible] tive vice-president at Investor, the [illegible] ing company at the center of the W[illegible]

DAVID CAMPBELL

empire. In addition, the cousins ow part of an influential inner core : executives who mull big issues. ed the "presidium," it was set up years ago after Peter had heart ry.

e stress is showing at Investor. In times, Investor receives dividends its holdings and plows capital into ited companies to finance their h. But Investor reported a first- er 1993 loss of $70 million, continu- downward trend that began last Its dividend income is shrinking, interest costs on its $2.3 billion are heavy. Such key holdings as -products giant Stora, ball-bearing r SKF, and Electrolux are being red by recession in Europe and conomies elsewhere.

re worrisome is Saab-Scania, now owned by Investor. In 1990 and the Wallenbergs paid a hefty $2.3 to buy out minority interests in ompany. The idea was for Investor the company's then rich cash flow ster its other holdings. The down- n truck and car sales dashed that Executives expect Saab-Scania to negative cash flow this year, a re- f the weak sales and interest on its illion debt.

RULES. The Wallenbergs ad- at crunch time at In- bodes ill for the . "This is a pe- when flexibil- d prepared- are power- important," Peter. "If you aded with debt, y you are not able many of the things you to do." Peter himself is to blame. He ran up in the 1980s by expand- while also fighting off ver threats from Volvo man Pehr G. Gyllenham- and others. In the pro- Peter violated a key fam- tum: Stay liquid.

de from the financial ze, the rules the Wallen- play by are getting a igher. Until recently, the benefited from a pro- e Swedish system rigged favor. But last January, limits on foreign take- of Swedish companies eliminated. Now, as part eden's preparations to e European Community, overnment may change rrangement that allows o classes of shares, one g 10 times the voting of the other. Capitaliz- ing on the system, the family gained leverage far beyond its stock holdings. For example, the Wallenbergs and an affiliated company, Incentive, control 93.2% of Electrolux with 6.3% of the shares.

The changes would require bigger holdings to control a company. "We would like to have increased holdings in a smaller number of operations to remain the dominant shareholders," says Claes Dahlbäck, 46, who was tapped 15 years ago to head Investor. There also will likely be more joint ventures or alliances, perhaps similar to the successful 1988 partnership of Asea with Switzerland's Brown Boveri Corp. Incentive, an industrial conglomerate 36% controlled by the Wallenbergs, has a 32.9% stake in Asea, which in turn owns half of ABB, the merged operations. It's an engineering powerhouse with annual sales of $30 billion.

The Wallenbergs may even seek outside help for S-E Banken. As a special adviser to the bank, Jacob is the point man negotiating a cash infusion from shareholders and perhaps the government. One possibility: Bring in a friendly backer, such as J. P. Morgan & Co., and try to carve off one part of the bank, such as the corporate-finance side.

ANALYSTS SAY THE FAMILY JUST DOESN'T HAVE ACCESS TO THE CAPITAL IT NEEDS

The prospect of entire holdings being sold off has galvanized managers to improve performance—and nurture ties with the two cousins. Stora Chairman Bo Berggren is only half joking when he says that he brought in Marcus Wallenberg to run Feldmühle's newsprint sales as a kind of insurance policy. "I thought it wouldn't be bad to have one of the obvious future leaders of the company on board with us," he says. "Maybe he won't forget us."

The cousins have risen in the traditional Wallenberg way: boarding school, college in the U. S., military training, and years of experience abroad. Each is sensitive to charges of nepotism. "Throughout our lives," says Marcus, "we have been told that to have a place here, we have to perform."

Jacob got an MBA from the University of Pennsylvania's Wharton School before heading off for banking stints in the U. S., Britain, and various Asian posts with Morgan Stanley, Citicorp, and S-E Banken. He sits on the board of Stora, Atlas Copco, and Ericsson and has already helped pull off major financings. In 1990, it was the restructuring of $800 million worth of Investor's short-term debt; a year later, raising the money for the Saab buyout.

SAAB STORY. Marcus, a graduate of Georgetown University's School of Foreign Service, is away this summer at a Stanford University graduate business program. When he returns, he will settle in at Investor. He will oversee business development and financing aircraft sales as a director at Saab-Scania. Quiet and reflective, he also followed a banking path around the world with Citicorp, S. G. Warburg, and S-E Banken.

Jacob and Marcus Wallen-

FRESH HOPE: SAAB'S NEW 900

THE WALLENBERG DYNASTY

Through their holding company Investor, the Wallenbergs control top Swedish multinationals with total sales of $65 billion. The largest are:

	1992 SALES BILLIONS OF DOLLARS	1992 PROFIT OR LOSS MILLIONS OF DOLLARS
S-E BANKEN Banking	ASSETS $63.0	-$692*
ELECTROLUX Appliances	$10.4	$130
STORA Forest Products	$6.0	-$175
ERICSSON Telecommunications	$6.0	$168
SAAB-SCANIA Autos, Trucks	$3.5	$93
SKF Bearings	$3.4	-$234
ASTRA Pharmaceuticals	$2.0	$653
ATLAS COPCO Compressors	$2.0	$130
INCENTIVE Holding Company	$1.5	$169

*OPERATING LOSS ON REVENUES OF $1.9 BILLION

DATA: INVESTOR, *SVEN-IVAN SUNDQVIST*, BUSINESS WEEK

berg will face hard choices. So far, executives at Investor are taking the easy steps. They are selling off small pieces of the company's investment portfolio. That raised $727 million last year. But such moves won't solve the big problems. Questions abound over what's to become of major holdings. Cashing out of Astra, where Investor shares are valued at $1 billion, would provide an enormous cash boost, but would deprive Investor of a future growth company. Advisers to the Wallenbergs suggest that Ericsson could ultimately be combined with another company, perhaps Northern Telecom Ltd.

The key to the extent of asset disposals may be Saab-Scania. "If things turn sour," warns Dahlbäck, "we'll dispose of more." For now, things look bleak at Saab. The vital truck unit is witnessing a free-fall in European industry sales, down one-third this year. Saab-Scania CEO Lars V. Kylberg doesn't expect an upturn before late 1994 at the earliest.

The car division, of which General Motors Corp. owns 50%, has piled up losses of $1 billion since the joint venture was struck in 1989. Earlier this year, each side had to pump $182 million into the venture. Still, thanks to productivity gains, the unit can break even now at 75,000 in sales, vs. 100,000 two years ago. What's more, tying in with GM enabled Saab to cut nearly one-third of the cost of developing a new model.

The division's future may hinge on sales of a new version of the 900, which was launched worldwide on July 21. "If the new model doesn't strike well, we're in trouble," admits Kylberg. "We may have to look at GM again." That would mean reducing the Wallenberg stake in return for more GM aid.

Meanwhile, plans are afoot to off-load more of the risk in Saab-Scania's other two units—military and civilian aircraft. As with other producers, the punishing mix of military cuts, uncertain airliner orders, and huge product-launch costs make going it solo virtually impossible. Talks are under way for possible combinations of the fighter division with British Aerospace, America's Northrop, and France's Dassault. On the civil side, where Saab is a leader in commuter turboprops, there have been talks with British Aerospace, Germany's Deutsche Aerospace, and the French-Italian ATR.

The Wallenbergs have been written off many times since they first set up shop in 1856, but they have always managed to adapt. Now the cousins' chief task will be to change again by deciding which companies to bet on and which ones to let go. If they make the right choices, there could still be an empire to pass on to the sixth generation.

By Richard A. Melcher, with Ariane Sains, in Stockholm

ENTREPRENEURS

FRANK LORENZO DUSTS OFF HIS FLAK JACKET

Plans for a tiny airline stir an uproar. His objective? Respect

He has been out of public view for three years, but Frank Lorenzo's name still conjures up strong reactions. To many people, the man who piloted Eastern and Continental into bankruptcy personifies greed and brutal tactics in the workplace. Captain J. Randolph Babbitt, president of the Air Line Pilots Assn., tags him the "embodiment of evil."

But to other observers, Lorenzo is a businessman worthy of respect. In their view, the 53-year-old former chairman of Texas International Airlines Inc. is a brilliant financial strategist and an independent thinker who simply had the guts to take harsh measures no other executive dared attempt. Lorenzo's real problem, some say, was an unappealing public persona that transformed a tough man into a monster.

Monster or maverick, Francisco A. Lorenzo shook up the industry as no one else in recent history has. Now, Lorenzo is itching to do it all over again. Fighting strong opposition in Washington, he's attempting to form an airline based in Baltimore that would woo East Coast passengers, using the same stratagem that made him successful before: slashing fares. Today's travelers, he says, are "troubled" by soaring ticket prices, particularly in markets such as Baltimore that have been dominated by one carrier. He plans to stick to nonrestricted airports, flying to cities such as Atlanta and Philadelphia.

SMALL FLEET. Lorenzo's plans don't sit well with labor. Although his airline would fly just two or three planes, union opposition has exploded, compelling the Transportation Dept. to turn Lorenzo's application for certification over to a judge for a full-blown review. Unions cite prior maintenance violations, allegations of financial self-dealing, and bankruptcies as reasons for oppos But as some see it, the motivat purely personal. The unions see venge. "No. 1, the unions want to c ue the vendetta of the '80s," says I zo. "No. 2, they're troubled by th that we figured out the equation."

The "equation" is simply cheap They let Lorenzo take a tiny, un able Texas carrier in 1971 and build the free world's biggest airline empire ever, making history—and enemies—every step of the way. Lorenzo's Texas International was the first to offer deep discounts. He was the first person to engineer a hostile takeover of a U. S. airline, Continental Airlines Inc. And he was the first airline manager to use bankruptcy to gut labor pacts.

So this fracas seems like old times. But Lorenzo claims it is "child's play" compared with the death threats and war of words that preceded the demise of Eastern Lines Inc., which shut down after a pling strike. Still, the battle ma more than he bargained for. It ha come highly politicized, with 120 bers of Congress—many of the ALPA's campaign contribution list— ing labor's position. And with su for President Clinton shaky, som the Administration may be inclin throw the unions an easy sop. "I

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FRANK LORENZO'S TURBULENT FLIGHT

1971	1980	19
Lorenzo's Jet Capital buys a controlling stake in tiny, unprofitable Texas International Airlines.	Forms holding company Texas Air Corp. Nonunion New York Air is formed as subsidiary.	Texas Air Continent in the first takeover airline in

y has a sympathetic ear in the House," says Martin R. Shugrue, e of now defunct Eastern. He says es no legal barriers to certifica- After all, Lorenzo has never been ted of a crime.

if labor can drag out the proceed- the legal bills could drive Lorenzo After enduring sarcastic com- over the proposed name "Friend- Air," Lorenzo dropped it without ation in favor of nondescript ATX. ue now gives Lorenzo a "50-50 " of prevailing.

HEST BOSS." Why does Lorenzo t himself to such torture? He t need the money. He is uneasy in lic role and jealously guards his y. He says it was painful to have e plastered on *Fortune* magazine's as "The Toughest Boss in Ameri- he answer, says one who knows s "the chance to prove he's right ey're wrong."

demise of Eastern, Pan Am, and Midway—fares have doubled, and traffic is down 12%. That situation means opportunity for low-cost startups, says Lorenzo.

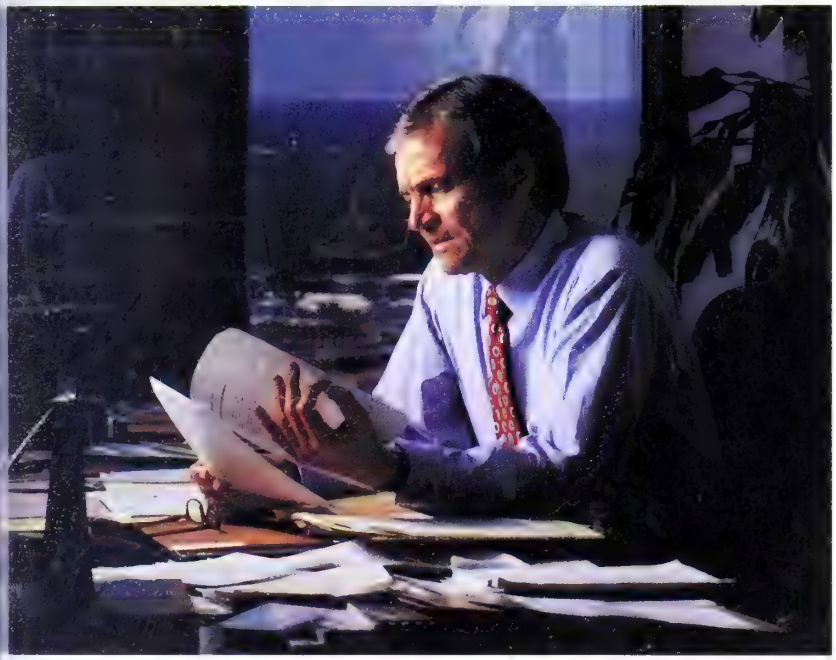
Yet in a service business such as commercial airlines, having a plan is never enough. One must cultivate a positive image. And that doesn't come naturally to Lorenzo. Many of the people who profess admiration for his intelligence describe him as moody and complex. Although he knows the other industry titans well—American's Robert Crandall, United's Stephen Wolf, and Air France's Bernard Attali—Lorenzo has never been what one would call a member of the club.

Even in private life, he remains enigmatic. Aside from his wife and children, Lorenzo is wary of everyone, say associates. "People generally aren't trustworthy in Frank's world," says an airline executive who has worked with Lorenzo.

the second time shortly after Lorenzo left. And under his aegis, Eastern did incur safety violations.

Lorenzo is never wanting for a response. He deflects the charges with the controlled patience of one who expects to be misunderstood. Some of his points at least merit debate: The airlines he purchased were all "basket cases," he says. And regarding maintenance fines, he notes they have been levied on plenty of competitors, too. But, he says, "you don't see unions yelling and petitioning to have [rivals'] management ruled on for fitness."

Still, if creditors or investors lost money by gambling on Lorenzo, the flying public came out rather well. The low fares at Continental, People Express, and Eastern helped drive down ticket prices throughout the industry. In testimony submitted to the administrative law judge now reviewing Lorenzo's record, former Civil Aeronautics Board Commissioner Alfred Kahn commended Lorenzo for taking "the kind of initiative that [the board] sought to encourage" when it deregulated the airline industry in 1978. And it's the impact on fliers, argue Kahn and Lorenzo, that counts.



Lorenzo, the answer lies in ex- g the equation. "Just compare has happened in West Coast and Coast markets over the last 10 " he says. In the West—where tition has been kept vibrant by s such as Southwest Airlines Co. merica West Airlines Inc.—fares risen only 5%, while traffic has d 75%. But in the East—where tition has been weak following the

"He has a strongly held view that people need to be tested and controlled."

However self-serving the union's rap may be, Lorenzo's record gives critics room to throw dirt. He was never charged with criminal wrongdoing, but he did settle lawsuits brought by creditors who alleged that he defrauded Continental. Two of his airlines had to file for bankruptcy—Eastern, which collapsed, and Continental, which filed for

OUGHTA BE A LAW. Former IBM Chairman John F. Akers says that's why he chose to become an investor in Lorenzo's would-be airline. Not unlike the company he just left, the big players in the airline industry "are structured in a way that was good for yesterday's business but not today's," says Akers.

It will be months before U. S. fliers experience Lorenzo's version of today's airline—if they ever do. Representative James L. Oberstar (D-Minn.) says there's "a lot of sentiment around to keep Lorenzo out of the skies," hinting that Congress might seek legislation to do just that.

Even if that happens, don't count Lorenzo out. His Savoy Capital Investments in Houston has holdings in health and food ventures. And Lorenzo says that Savoy has also been "active with [advising] a number of foreign carriers." But he's not content merely to dispense advice. "It would not be out of the question to assist in forming airline ventures overseas," he says. Depending on where you sit, that's either a promise or a threat.

By Andrea Rothman in New York and Seth Payne in Washington

3	1986	1988	1989	1990	1993
files for and then labor	Lorenzo buys two ailing carriers, Eastern Air Lines and People Express.	Transportation Dept. conducts unprecedented investigation of Texas Air and finds it fit to fly.	Eastern files for bankruptcy after a strike by machinists. Judge later removes Lorenzo as head of airline.	Lorenzo sells his stake in Continental and airline files for bankruptcy in December, emerging in 1993.	Lorenzo announces intention to return to airline industry, prompting outcry from labor.

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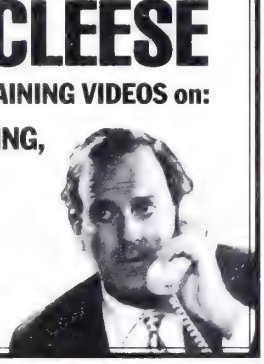

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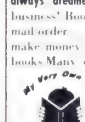

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EDITED BY AMY DUNKIN

Computers

SIZING UP THE NEW SUBNOTEBOOKS

When you're on a business trip lugging a garment bag, a briefcase, and other travel paraphernalia, a seven-pound notebook computer with a two-pound battery charger doesn't feel so light. What's more, when you're stuffed into your airline seat and find that the computer barely lies stable on the tiny seat tray, you may decide to forgo your solitaire game—or the report that's due tomorrow—and pull out the latest best-seller instead.

Once again, technology comes to the rescue. The newest, hottest gadgets in the computer world these days are subnotebooks—computers about the size of a John Grisham novel that weigh less than four pounds. These are not just expanded electronic organizers. They're full-fledged computers, with fast microprocessors, the ability to run Microsoft's Windows, easy-to-use keyboards, pointing devices, and bright, decent-size screens. And their lightweight batteries last for four hours or more—long enough to let you work on an entire flight from New York to Denver.

Thanks to big advances in component and power-management technology, computer makers can now squeeze the power of a desktop personal computer into a package measuring about 10 inches by 8 inches. Subnotebooks started showing up last year, but in the past few months, manufacturers have stumbled over each other to bring out versions. Among the offerings are IBM's ThinkPad 500, Hewlett-Packard's OmniBook 300, Zenith's Z-Lite 320-L, Epson's ActionNote 4000, Zeos' Contenda, Compudyne's 4SL/25XZ, and Gateway 2000's HandBook. None are cheap—prices range from $1,600 to $2,500. Even so, computer stores report that subnotebooks are often sold out within days of arrival.

But don't expect nirvana. To get the weight down, something had to give, and every manufacturer has given up different features, be it quality, keyboard size, speed, floppy-disk drive, or battery life. None of the subnotebooks have color screens—color eats up too much battery power. And to save space, no subnotebook comes with a built-in floppy-disk drive. If you like to carry around files on floppy disks, you will also have to take an external drive that plugs in with a cable.

PACESETTERS. So before you buy, think about how you use a portable computer, and then spend time testing models. That way, you can figure out which features you really care about and which you're willing to sacrifice. Two good models to use for comparison are the subnotebook pacesetters of the moment, IBM's ThinkPad 500 and Hewlett-Packard's OmniBook 300. Each takes a completely diff approach to superportal and if you play around the two side by side, yo quickly figure out the and cons of the categor

The ThinkPad 500 i baby cousin of IBM's crit acclaimed ThinkPad 700 smaller ThinkPad has same sleek black case quality backlit screen, a tegrated pointing device it weighs only 3.8 po compared with the 700 pounds. The 500 us 486SLC microprocessor of the fastest availabl portable compu and can store 170 megabyte

n a hard disk. It also ıe of the slimmest ex- floppy drives around. ever design feature: To ıte the need for a bulky r, IBM built an AC plug ıe battery so you can he unit directly into a ıtlet to charge it.

-ON. On the downside, reen is only 7.4 inches al, so the solitaire cards mall. (You can enlarge pe size, but that will ou fewer words per .) The keyboard is also hed down to about 90% size of a desktop PC's. endent studies have that a keyboard can be ed that small without the ability to touch- ut an unscientific study INESS WEEK reporters that the ThinkPad 500's rd caused a significant r of typos. A pends on the f your hand w you type, one out for utes or so be- eciding.

Another controversial feature on the ThinkPad is the TrackPoint, a little red knob in the middle of the keyboard that looks like a pencil eraser and acts like a mouse, moving the cursor when you wiggle it. You don't have to take your hands off the keyboard to use it, a plus when you're crowded into the middle seat on an airplane. Once again, in an unscientific survey, some love it, some hate it. The TrackPoint has won kudos from computer review magazines, but it takes getting used to.

The OmniBook 300 has a different set of pluses and minuses. At 2.9 pounds, you can't beat it for weight—every other subnotebook is almost a pound heavier. And you can't beat it for convenience: It can run on four AA batteries for about 3½ hours. It also has a light, rechargeable battery that's smaller than a cigarette pack.

Other nice features include a full-size keyboard—no cramped fingers here—and a nifty mouse that pops out of the right side of the machine. (It might not be popular with lefties.) If you hate trackballs, you'll love this mouse. Hewlett-Packard also thought to build Windows, Word, and Excel software and other common applications directly into the main memory. You can access the software with one keystroke, and when you turn the system on, it starts right where you left off. The hard disk can store only 20 to 40 megabytes of data, but you don't need as much storage with so much software built in.

EYESTRAIN. There's one big downside to the OmniBook 300: no backlit screen. The reflective screen is high quality, and at 9 inches diagonal, it's bigger than most other subnotebook displays. But there's no question that the lack of backlighting might cause eyestrain after a while. The second big problem is the chip. The OmniBook 300 uses a 386SXL microprocessor, considerably slower than the 486 in the ThinkPad and most desktop PCs. Solitaire players will notice the cards flip slowly with this chip. The OmniBook 300 also has no external floppy-disk drive, though its built-in version of LapLink, a popular file-transfer program, makes it easy to move files to and from your PC.

The other subnotebooks offer variations on these two themes. Backlit screens are invariably smaller than reflective displays, since 486 chips mean more weight than the 386 versions. The main differences after that are the pointing device and the keyboard. The Zenith Z-Lite has a trackball pointing device on a ledge at the bottom of the keyboard—easy to use and nice to rest your hands on. The backlit screen is 8.5 inches, almost as big as the OmniBook's, but the keyboard is smaller, and it uses a 386 chip.

Epson's ActionNote 4000 is one of the cheaper backlit-screen subnotebooks, list-priced at $1,949, and offers still another option for a pointing device. Its trackball is in the upper right-hand corner, above the keyboard, which is, like the ThinkPad's, not quite full-size. You have to move your hand off the keys to use the trackball, but it's simple to master. And the ActionNote has the same fast 486SLC chip as the ThinkPad 500.

The ideal subnotebook, of course, would have the OmniBook's weight and keyboard, the ThinkPad 500's microprocessor and screen, and a choice of pointing devices. And it wouldn't cost $2,000. If you don't want to compromise, you should wait six months to a year, when the next generation of subnotebooks makes its way to market and prices of older models start dropping. In the meantime, you could always play airplane solitaire the old-fashioned way, with a deck of cards. *Catherine Arnst*

ZENITH Z-LITE 320-L
$1,599-$2,799
A convenient trackball and a large backlit-screen. Uses a slower chip

HEWLETT-PACKARD OMNIBOOK 300
$1,999-$2,499
Only 2.9 pounds, it runs on four AA batteries. A pop-out mouse. No backlit screen

Smart Money

UNMANAGED STOCKS: GOOD BET OR GIMMICK?

Unit investment trusts (UITs) were made for investors who like to buy and hold. Managers of mutual funds may be trading constantly to maximize returns. But with an equity unit investment trust, you get a fixed portfolio of stocks that lasts 1 to 30 years. The UIT stocks just sit there, unmanaged, for the term of the trust. If a stock is ailing, it can be sold, but it commonly isn't replaced. The bottom line is you're betting on the prescience of stock pickers to assemble a winning package at the start.

Sounds kind of risky. What if several stocks sour? Or what if the stocks are doing well when the trust dissolves, making it a bad time to sell? Do you save enough in management fees to fare better than with a mutual fund?

Many pros say equity UITs, offered by most brokerage houses, are impractical and expensive. "It seems more like a marketing gimmick than a sound financial idea," says John Markese, head of the American Association of Individual Investors. Says Linda Lubitz, a financial analyst in Coral Gables, Fla.: "Buying an unmanaged basket of assets doesn't really add any value." And though you don't pay for management, sales fees can be steep. UITs charge 1% to 5% up front, and a supervisory fee of $1.50 to $1.75 per $1,000 per month. That's equivalent to mutual funds with loads, not no-load funds. Some UITs require you to pay a sales charge again if the trust expires and you roll over money into a new trust.

With so many strikes against equity UITs, it's not surprising that money is flooding into mutual funds rather than these trusts. Nonetheless, even though the majority of UITs just hold bonds, major brokerages insist equity UITs have their place. They say the trusts give you instant and affordable diversification, usually for a minimum investment of $1,000—but as little as $250 for individual retirement accounts. And they point out that you can sell your trust at any time for the current market value of the stocks. Some trusts even claim to offer a guaranteed return by combining stocks with safe government bonds.

Moreover, they say, with a UIT, unlike a mutual fund, you know exactly what stocks you own at any time. Because what you see is what you get, "if you think the stocks are going bad, you can decide to get out," says Robert Holly, director of unit trusts at PaineWebber.

One form of an equity UIT mimics stock market indexes. Advocates say these UITs are a good investment vehicle because they rise and fall with the index and don't need to be managed. For example, Merrill Lynch's Select 10 Portfolio holds the 10 stocks from the Dow Jones industrial average yielding the highest dividends. But it has reaped a total return of 20.9% from May, 1991, when it was launched, to May, 1993, while the Dow has risen 22.9%. And its 1% load plus a small ongoing charge of $1.50 a month per $1,000 look pricey compared with an average annual expense ratio of less than 1% for index mutual funds.

Equity UITs can get even more expensive when brokers pseudomanage them by limiting their term to one year, then reconstituting ther new stocks. Take Le Brothers' Ten Uncomm ues, which holds 10 unc ued stocks expected t perform their sectors year's picks include Am Hess, General Motors Citicorp. Next June, t will dissolve and be r with the analysts' new At that point, you ca or roll over your unit rolling over can be cost pay the 4% sales char Uncommon Values each Also, for the past three you would have barel performed the Stand Poor's 500-stock index.

HEDGES. You can also fi uity trusts invested in stock groups, such as and telephone companie act like bonds, big dividends and ing slowly. Yet trusts hedge on volatility by incl bonds in the mix dential's Govern Securities Equity divides its holdin tween Treasury coupon bonds shares in a stock Units cost $15 eac the zeros mature in 14 years, so guaranteed a share profit whe trust dissolves. your money is in products, the re in quality, long stocks," says Bill H UIT marketing manag Prudential.

Of course, you coul the Treasuries yourse put the rest in a no-loa tual fund, saving on UIT Another problem: Unlik tual funds, UITs aren't tr and ranked, making hard to evaluate. With UITs, what you see m what you get, but if yo it all up, the picture from clear. *Pam*

Worth Noting

■ **RATE RISK.** A free slide tool from the Blanchard Group of Funds can help you figure out how interest-rate movements will affect your bond returns. As interest rates rise, bond yields fall, with longer-term issues hurt the worst. Receive Blanchard's Interest Rate Risk/Reward Calculator by calling 800 458-8621, ext. 6119.

■ **SALE SOLUTIONS.** *How To Sell Your House, Condo, Co-op* from Consumer Reports Books ($15.95 in paperback) offers tips on setting the price, deciding whether to sell it yourself or work with a broker, and negotiating buyers. Make your "show" better by cleanin carpets and replacing room fixtures. Look fo book in stores, or call 80 0722 to order by mail.

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And see your Allstate Agent for a free brochure containing important information on home fire safety, and discount coupons from Sears on batteries, smoke detectors and fire extinguishers. Or write: Allstate, Dept. SD, P.O. Box 7660, Mount Prospect, IL 60056-9961.

You're in good hands.

Allstate

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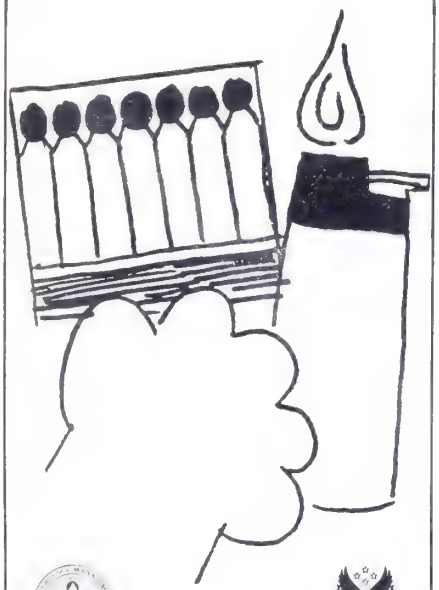
CURIOUS KIDS SET FIRES

When a kid strikes a match, fire strikes back! Children don't realize that a simple flame can blaze out of control in mere minutes. That may be why nearly twenty-five percent of the fires that kill young children are started by children themselves playing with fire.

Don't let fire strike your family. Always keep matches and lighters far out of the reach of children.



A message from your local fire department, this publication, and the U.S. Fire Administration.

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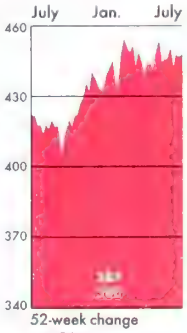
vestment Figures of the Week

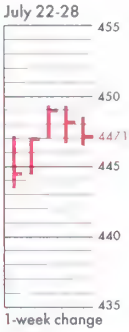
NTARY

Jones industrials surged high of 3567.7 on July ave up the gains and fin- week virtually un- as did the broader S&P size companies, howev- better than those larger ; the S&P Midcap Index 2%. Long-term interest ked up, as some bond ok profits from the recent spooking the bond s Fed Chairman Alan n's threats to raise inter- f inflation kicks up.

STOCKS

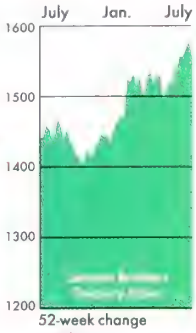


52-week change
+5.9%

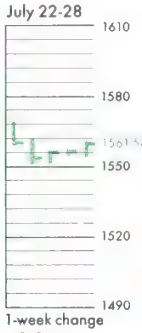


1-week change
0.0%

BONDS

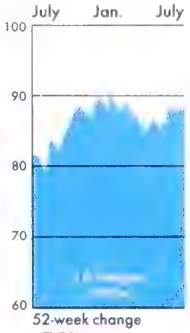


52-week change
+8.3%



1-week change
−0.3%

THE DOLLAR



52-week change
+7.5%

1-week change
−0.1%

KET ANALYSIS

CKS	Latest	% change Week	52-week
ES INDUSTRIALS	3553.5	−0.1	5.2
COMPANIES (S&P MidCap Index)	166.9	1.2	14.8
MPANIES (Russell 2000)	236.0	0.5	22.3
ANIES (Russell 3000)	257.8	0.1	8.7

H STOCKS	Latest	% change (local currency) Week	52-week
(FINANCIAL TIMES 100)	2884.2	2.5	19.0
IKKEI INDEX)	19,829.6	−1.3	31.4
(TSE COMPOSITE)	3923.1	1.4	14.6

FUNDAMENTALS	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.15%	3.14%	3.25%
30-YEAR TREASURY BOND YIELD	6.65%	6.63%	7.45%
S&P 500 DIVIDEND YIELD	2.79%	2.80%	3.01%
S&P 500 PRICE/EARNINGS RATIO	21.3	21.2	24.6

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 26-week moving average	445.9	445.6	Positive
Stocks above 26-week moving average	55.8%	56.8%	Negative
Speculative sentiment: Put/call ratio	0.51	0.53	Positive
Insider sentiment: Vickers sell/buy ratio	2.32	2.30	Neutral

STRY GROUPS

BRIDGE INFORMATION SYSTEMS INC

EEK LEADERS	% change 4-week	52-week	Strongest stock in group	% change 4-week	52-week	Price
PORTATION SERVICES	12.1	33.0	PITTSTON SERVICES GROUP	25.8	30.9	20 1/8
TAL MANAGEMENT	11.5	3.1	GALEN HEALTH CARE	13.6	74.0	20 7/8
AND MOTELS	8.8	82.6	PROMUS	18.2	314.6	56 3/4
VARE AND TOOLS	7.9	13.9	SNAP-ON TOOLS	10.7	39.2	42 5/8
NUM	7.7	−2.1	REYNOLDS METALS	13.9	−10.3	51 1/4
EEK LAGGARDS	**% change 4-week**	**52-week**	**Weakest stock in group**	**% change 4-week**	**52-week**	**Price**
EL MANUFACTURING	−15.7	−18.3	LIZ CLAIBORNE	−28.5	−33.6	22
UNICATIONS EQUIPMENT	−14.5	−3.8	NORTHERN TELECOM	−25.1	−38.7	21 5/8
TER SYSTEMS	−12.4	−39.2	APPLE COMPUTER	−34.0	−42.2	26 1/2
	−10.9	25.1	BETHLEHEM STEEL	−20.1	12.3	14 7/8
NE TOOLS	−9.5	16.2	GIDDINGS & LEWIS	−10.3	−14.3	19 1/2

UAL FUNDS

MORNINGSTAR INC.

S total return	%
STON STRATEGIC INVESTMENTS	10.0
SERVICES WORLD GOLD	8.8
ESSIVE AGGRESSIVE GROWTH	7.5

otal return	%
STON STRATEGIC INVESTMENTS	86.8
GROWTH	77.9
SON OPPORTUNITY A	56.9

LAGGARDS Four-week total return	%
FIDELITY CANADA	−6.4
EQUITY STRATEGIES	−6.2
PUTNAM ENERGY-RESOURCES	−5.9

52-week total return	%
INVESCO STRATEGIC HEALTH SCIENCES	−14.6
FIDELITY SELECT HEALTH CARE	−13.5
INVESCO STRATEGIC ENVIRONMENTAL SVCS.	−13.3

TIVE PORTFOLIOS

DRI/McGRAW-HILL

mounts
t the present
$10,000
one year ago
portfolio

ges indicate
total returns

Foreign stocks
$13,288
+1.11%

Treasury bonds
$11,970
−1.50%

U.S. stocks
$11,042
+0.21%

Gold
$10,937
+0.06%

Money market fund
$10,231
+0.05%

this page are as of market close Wednesday, July 28, 1993, unless otherwise indicated. oups include S&P 500 companies only; performance and share prices are as of market close July 27. Mutual fund returns are as of July 23. Relative portfolios are valued as of July 27. A more detailed explanation of this page is available on request

AMERICAN STEEL IS TOUGH ENOUGH FOR FREE TRADE

The July 27 ruling by the International Trade Commission, lifting tariffs on many grades of steel imported into the U.S., is an important victory for fair and competitive international trade. But it may also have done American Big Steel a favor. By keeping the door open to many imports, the ITC's decision may pave the way for U.S. exports. And that could induce U.S. steelmakers to look more favorably on the stalled talks to hammer out an accord to settle trade disputes among steelmakers worldwide.

In removing some of the tariffs that the Commerce Dept. last month had slapped on diverse steel imports from 20 countries, the ITC rejected U.S. steelmakers' arguments that a broad range of dumped and subsidized foreign steel was injuring them. The ITC did find that foreigners' predatory pricing on certain products hurt the domestic industry, and it let tariffs on those items stand.

Now, steelmakers will have to rely more and more on productivity and quality gains to be profitable. That may not be so difficult. Since 1980, U.S. companies have undergone a painful restructuring, closing plants, shedding jobs, and investing $35 billion in new plants and machinery. Today, the operating cost per ton of steel is lower in the U.S. than in Germany, Japan, France, or even Mexico.

Now that the ITC has kept the door open to many imports, the Clinton Administration might rethink its trade policy. Steel manufacturers should be protected only if unfair trade occurs. Otherwise, manufacturers should be urged to think more globally. Bringing U.S. steelmakers into multilateral talks on a steel accord—a move that steelmakers resisted as they pushed for tariffs—would help pave the way.

WHAT RUSSIA CAN REAP FROM ITS RUBLE FIASCO

It had all the hallmarks of a Soviet-style edict. Suddenly undertaken, the Russian Central Bank's move to gather in all bank notes issued before 1993 threw citizens into a panic. Central Bank Chairman Viktor Geraschenko acted while both President Boris Yeltsin and Finance Minister Boris Fyodorov were out of Moscow and Yeltsin modified the decree on his return. But the Russian government's credibility was damaged all the same.

Still, some good may come of the call-in. Yeltsin's archenemy, parliamentary speaker Ruslan I. Khasbulatov, roundly denounced the Central Bank, which, while nominally independent, is answerable to the Congress. This might be a good time for Yeltsin to maneuver the Central Bank out from under the purview of Congress. He might fire the bank's top managers and force it to act more in concert with the Finance Ministry, which has many reformers in its ranks.

Equally important, the currency fiasco should prompt more former Soviet republics to introduce their own currencies and break away from the so-called ruble zone, whi never functioned properly. Numerous republics hav tinued to use the ruble, even while their own central set widely differing policies. Meanwhile, about 20% of t ble credits pumped out to enterprises last year by th sian Central Bank went to non-Russian companies.

Now, the Central Bank may have forced the repub realize that they must depend on themselves—and their own currencies and monetary management. For that have already done so, results have been mixed: Th tic republics, especially Estonia, have had some succes tling inflation after introducing their own currencies. Uk however, which also has its own currency, has fail maintain monetary discipline. But at least the financi coupling of the republics would remove an unworkabl tige of the Soviet system and deprive Russia's Central of yet another excuse for mismanagement.

MAKE FAMILY LEAVE AFFORDABLE FOR THE PO

The Family & Medical Leave Act of 1993, intend promote "the stability and economic security of lies," goes into effect on Aug. 5. Its federal mand 12 weeks of unpaid, job-guaranteed leave for famil medical purposes is long overdue. The trouble is, man income women can't afford to take such a break—typ maternity leave—even for just 12 weeks, which is half the time most major corporations allow employees key to making sure low-income women take time off provision of some form of wage replacement.

The Families & Work Institute in New York notes poor women take less time off work after childbirth—an less likely to take the medically advised minimu weeks—than middle- and upper-income women. Today five states—California, Hawaii, New Jersey, New York Rhode Island—require that employees be enrolled in te rary disability insurance (TDI) plans, which extend p wage replacement during disability, including pregnan

Employers may worry about piling the cost of wag placement on top of unpaid leave. But unpaid leave is n pecially costly: The General Accounting Office estim that 908,000 employees a year would take leave unde new act to care for babies, at a total cost to the econo $244 million annually. For individual employers, this av es $269 per leave taken, or $10 per worker covered.

Partial replacement of wages would certainly raise th Even so, there are ways to pay. First, TDI could be ad by all states and financed through employee contribu employer contributions, or a combination. A second po ity might be to extend the unemployment compens system to cover temporary maternity absences. Again ployees could pick up part of the tab. Finally, a special efit might be awarded to families with new children. such cases, federal law might set an income cut-off a which wage replacement would be unavailable. This could limit the cost—but still give poor people the mea use a very important benefit.

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BusinessWeek

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FL PS

Too many new products fail. Here's why—and how to do better.

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Bumper To Bumpe

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fully slow? It did to us.

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formance engine that can comm

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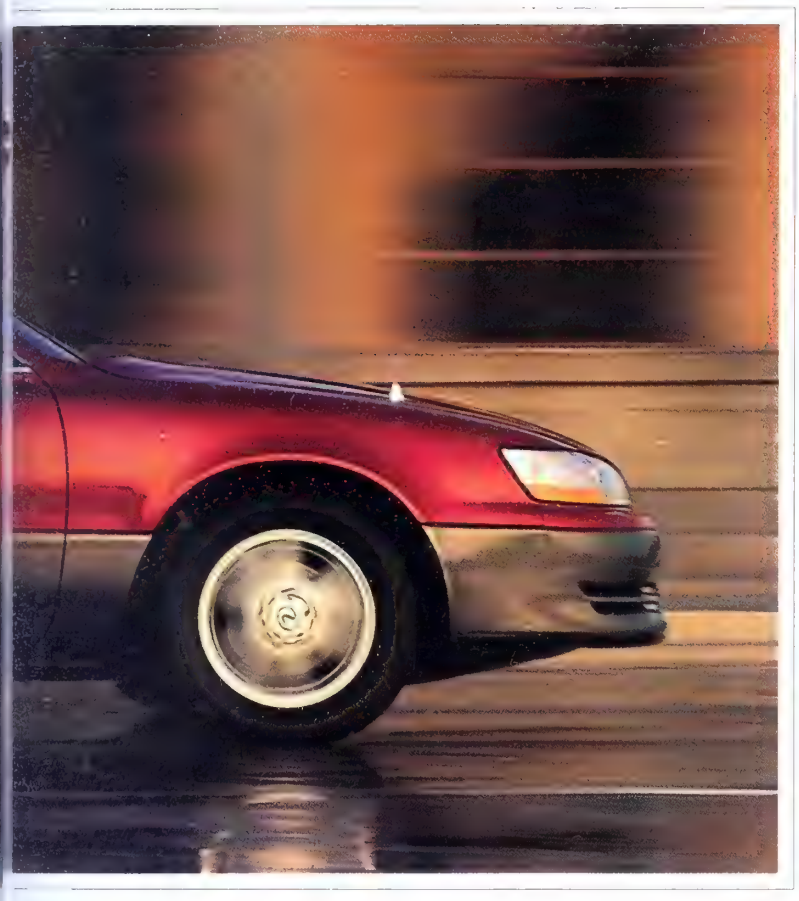

oosebumps.

n 8 seconds* and put it into the ES 300 luxury sedan.

Notice we said luxury sedan, not mance car. Because even though it has a responsive 185-horsepower V6 under its hood, and ABS brakes behind its wheels, there's a lot more to the ES 300 than indulgent power.

There's indulgent everything: a sound-dampened cabin, eight-speaker audio system, power front seats and automatic climate control. There's even a remote entry system that comes standard.

Of course, if you think all of this sounds good, wait until you hear the engine. Gives us goosebumps just thinking about it.

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The HP 4L isn't bad, b

THE HP 4L

There's only one option on the HP 4L. A memory upgrade from 1MB to 2MB.

The HP 4L is a good laser printer. Just limited.

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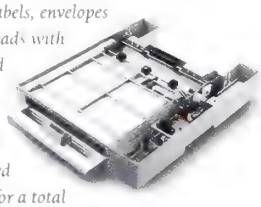
's no ActionLaser 1500.

Epson's RITech (Resolution Improvement Technology) increases the ActionLaser's normal 300 dpi print quality to eliminate jagged edges right where you need it: in the curved lines of letters, numbers and images. And Epson's MicroArt printing technology gives you deep, dark blacks and incredibly fine lines.

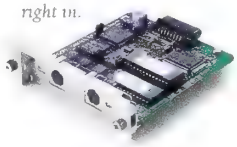
27 fonts (13 scalable) are standard. Should you expand your typographical horizons, unlimited fonts are easy to install via HP-compatible plug-in cartridges, available anywhere. The HP 4L doesn't accept HP's cartridges.

The ActionLaser has 150 sheet paper capacity (letter or legal), and handles stacks of labels, envelopes and overheads with ease. And there's an optional 250 sheet auto-feed cassette, for a total of 400 sheets. The HP 4L holds 100 sheets. Envelopes, labels and overheads are manually fed, one at a time.

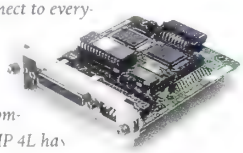


The ActionLaser 1500's top speed is six ppm. That's seriously fast, fifty percent faster than the HP 4L.

If you have a DOS machine, but decide to get a Macintosh, do you need a new printer? Not with an ActionLaser 1500. Just add our EpsonTalk interface and your Mac plugs right in.



The ActionLaser 1500 comes standard with parallel and serial interfaces that allow two users to share a single printer. Add another interface and a third user can share the same printer. The ActionLaser 1500 can connect to everything from PCs to IBM mini and mainframe computers. The HP 4L has one interface.



THE EPSON ACTIONLASER 1500

It's easy to add more memory. Just pop in inexpensive, industry standard DRAM chips, for a maximum of 5 MB. The HP 4L only goes up to 2 MB.

PCL 5 is standard. The extra power of Adobe PostScript is a simple plug-in option. With HP, you have to buy another printer to get PostScript.

PC Computing Best Buy. (June 1993.) The word is getting around. The Epson ActionLaser 1500 is the best choice in personal lasers.

The ActionLaser 1500 comes with Epson's limited two year warranty. HP offers one year. For help, call the Epson Connection. Quite possibly the best help line in the business. And it's free.

Don't buy a laser with a limited future. Buy one that is able to expand for the future. Compare, and you'll see why the speedy, inexpensive ActionLaser™ 1500 is the one laser worth owning. For information on the Epson ActionLaser 1500, our ink jet and dot matrix printers, or scanners, call the Epson Connection™ at **1-800-BUY-EPSON** (800-289-3776).

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NUMBER 3332

BusinessWeek

AUGUST 16,

LESSONS FOR THE LAUNCHERS: ROBERT McMATH COLLECTS BOTH NEW-PRODUCT WINNERS AND LOSERS—AND SHOWCASES THEM FOR DEVELOPI

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From the Edsel to New Coke, new-product failures have had a long, inglorious history. Not all flops can be avoided, but there are still too many. In a time of slow growth, it pays to find out why they happen—and how to raise the success rate. Here are anatomies of recent fiascoes, along with a six-step program for better launchings. They could help prevent the next loser

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If IBM's megaloss had not cast a long shadow over the second quarter, earnings for the 900 companies in the Scoreboard would look fairly healthy

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Modernizing the oil giant will take plenty of foreign investment

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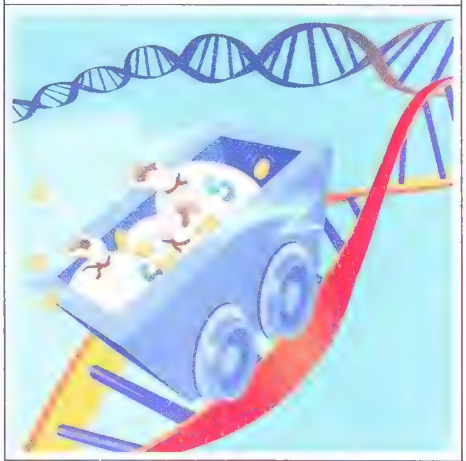

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The groupware program is hot, and the company expects annual revenue from it in the hundreds of millions

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No pain, no gain on the deficit
Germany's key export? Leadership

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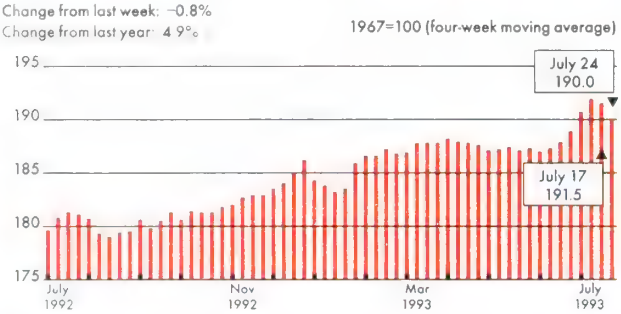
BusinessWeek Index

PRODUCTION

Change from last week: −0.8%
Change from last year: 4.9%

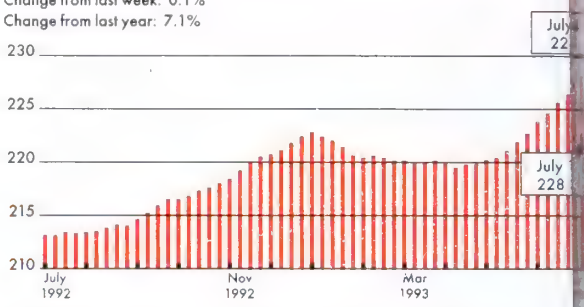


The production index fell during the week ended July 24. Continued plant shutdowns for model changeover caused declines in seasonally-adjusted auto output. Electric power, paperboard, and paper production and rail-freight traffic also declined. Truck, coal, and lumber output increased, while crude-oil refining and steel output were unchanged. Before calculation of the four-week moving average, the index dropped to 185.8, from 187.1 in the week before.

BW production index copyright 1993 by McGraw-Hill Inc

LEADING

Change from last week: 0.1%
Change from last year: 7.1%



The leading index was little changed in the week ended July 24, but a reversal in the growth of real estate loans suggests a downtrend in coming The other drags on the index came from lower stock prices and growth in mo prices and a rise in business failures. The growth in M2 and bond yields virtually unchanged. Because of the sharp real-estate loan drop, the unave index plunged to 227.5 from 229.5 in the previous week.

Leading index copyright 1993 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (7/31) thous. of net tons	1,826	1,873#	4.6
AUTOS (7/31) units	69,812	66,290r#	11.7
TRUCKS (7/31) units	61,409	57,686r#	18.8
ELECTRIC POWER (7/31) millions of kilowatt-hours	70,250	67,993#	7.0
CRUDE-OIL REFINING (7/31) thous. of bbl./day	14,043	14,273#	1.7
COAL (7/24) thous. of net tons	17,632#	16,772	−5.3
PAPERBOARD (7/24) thous. of tons	804.6#	820.1r	0.5
PAPER (7/24) thous. of tons	779.0#	776.0r	−0.3
LUMBER (7/24) millions of ft.	448.3#	443.7	−8.0
RAIL FREIGHT (7/24) billions of ton-miles	21.2#	20.1	3.9

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA[1], SFPA[2], Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (8/4)	104	106	128
GERMAN MARK (8/4)	1.71	1.71	1.48
BRITISH POUND (8/4)	1.50	1.48	1.91
FRENCH FRANC (8/4)	5.90	5.85	4.99
CANADIAN DOLLAR (8/4)	1.28	1.28	1.18
SWISS FRANC (8/4)	1.50	1.51	1.33
MEXICAN PESO (8/4)[3]	3.109	3.119	3.098

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (8/4) $/troy oz.	402.650	393.150	14.8
STEEL SCRAP (8/3) #1 heavy, $/ton	118.50	118.50	33.9
FOODSTUFFS (8/3) index, 1967=100	208.5	208.6	5.5
COPPER (7/31) ¢/lb.	91.3	90.3	−23.3
ALUMINUM (7/31) ¢/lb.	56.5	56.0	−7.2
WHEAT (7/31) #2 hard, $/bu.	3.36	3.29	−1.2
COTTON (7/31) strict low middling 1-1/16 in., ¢/lb.	55.79	57.35	−6.4

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, *Metals Week*, Kansas City market, Memphis market

LEADING INDICATORS

	Latest week	Week ago	%
STOCK PRICES (7/30) S&P 500	448.60	446.40	
CORPORATE BOND YIELD, Aaa (7/30)	7.14%	7.17%	
INDUSTRIAL MATERIALS PRICES (7/30)	95.1	94.5	
BUSINESS FAILURES (7/23)	355	303	
REAL ESTATE LOANS (7/21) billions	$400.2	$402.3r	
MONEY SUPPLY, M2 (7/19) billions	$3,483.1	$3,482.3r	
INITIAL CLAIMS, UNEMPLOYMENT (7/17) thous.	351	328	

Sources: Standard & Poor's, Moody's, *Journal of Commerce* (index: 1980=100), Dun street (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally data on business failures and real estate loans

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	%
PERSONAL INCOME (June) annual rate, billions	$5,296.2	$5,298.7r	
CONSUMER SPENDING (June) billions	$4,323.9	$4,297.5r	
CONSTR. SPENDING (June) annual rate, billions	$460.1	$454.6r	
12 LEADING INDICATORS COMPOSITE (June) index	151.6	151.4r	

Sources: Commerce Dept., Census Bureau

MONETARY INDICATORS

	Latest week	Week ago	%
MONEY SUPPLY, M1 (7/19)	$1,085.3	$1,085.3r	
BANKS' BUSINESS LOANS (7/21)	272.0	272.1	
FREE RESERVES (7/21)	752r	990r	
NONFINANCIAL COMMERCIAL PAPER (7/21)	159.3	158.0	

Sources: Federal Reserve Board (in billions, except for free reserves, which are expresse two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	
FEDERAL FUNDS (8/3)	3.06%	3.01%	3
PRIME (8/4)	6.00	6.00	6
COMMERCIAL PAPER 3-MONTH (8/3)	3.22	3.23	3
CERTIFICATES OF DEPOSIT 3-MONTH (8/4)	3.16	3.18	3
EURODOLLAR 3-MONTH (7/30)	3.19	3.15	3

Sources: Federal Reserve Board, First Boston

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equip
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

malaysia AIRLINES

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RESEARCH SERVICES

Inflight Research Services of London recently conducted a review of 31 airlines' First Class products and services. The final rankings and total percentage points are:

1.	**Malaysia Airlines**	62.3
2.	Singapore Airlines	60.0
3.	Japan Airlines	58.2
4.	Cathay Pacific	57.7
5.	KLM	56.8
6.	Swissair	56.3
6.	Thai Airways	56.3
8.	All Nippon Airways	54.9
8.	American Airlines	54.9
10.	South African Airways	53.8
10.	Qantas	53.8
10.	United Airlines	53.8
13.	Emirates	53.0
13.	British Airways	53.0
15.	Gulf Air	52.5
15.	Sabena	52.5
17.	Air France	50.8
18.	Kuwait Airways	50.4
19.	Air Lanka	50.0
19.	Delta Air Lines	50.0
19.	Korean Air	50.0
19.	Northwest Airlines	50.0
19.	TWA	50.0
24.	Philippine Airlines	48.8
24.	Pakistan International	48.8
26.	Iberia	48.0
27.	Turkish Airlines	47.5
28.	Alitalia	46.2
28.	Lauda Airline	46.2
30.	Garuda Indonesia	45.9
31.	Air India	45.2

It's always nice to be recognised. But especially pleasing to be considered the best, and to be setting new standards. On Malaysia Airlines First Class, we have always given our best. But now it's considered the finest of all these airlines. So isn't it time to judge for yourself? Fly Malaysia Airlines and see how putting you first has put us in the same position.

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ironmental Protection, your applications will get top-priority attention, thanks to a new, -track permit process. An ombudsman will make sure of it.

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So, you SAY you don't have a problem with workflow?

Although companies have invested billions of dollars in technology, the hourly output of the average worker has increased by only 1% per year, over the last two decades.

What went wrong? It's largely a matter of different technologies moving in different directions, at different times. So people spend more time thrashing than they do getting work done.

Fortunately, there's a way to get everyone working in sync: InConcert Workflow Management Software, from XSoft.

InConcert goes beyond the typical idea of "software," because it's tailored specifically to your business. And by synchronizing the flow of information to the right people at the right time, *it will fundamentally improve the way you do business.*

InConcert makes life easier for system administrators and users because it's fully open. It's easily integrated with your existing hardware and software and compatible with any database you choose. But more importantly, InConcert is extraordinarily easy to use. Users can complete even the most complex tasks through a simple graphical interface. So they actually enjoy using it.

Curious? We'll send you a free white paper, "Getting the Job Done: A Guide to Workflow Management." **Just call 1-800-626-6775, ext.141.**

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Readers Report

WHAT IT WILL TAKE TO JUMP-START THE ECONOMY

Kuttner's article, "Why the economy isn't heeding Clinton's call" (Economic Viewpoint, July 26), arguing for an investment stimulus, necessitates comment. First, the Clinton plan to stimulate the economy through deficit reduction or lower interest rates is by itself erroneous, in that lower rates are in themselves a reflection of lower demand. It is no different than saying lower apple demand will reduce the price of apples. However, the lower price will not increase the consumption of apples.

Kuttner errs when he states real interest rates during the Great Depression were zero. From 1929 to 1933, the consumer price index fell by about 25%, about the same drop as the M1 money supply. The real rate of interest rose markedly, as borrowers were forced to repay with more expensive dollars. This, coupled with negative expectations concerning profitability, significantly inhibited investment.

Herbert M. Bernstein
Philadelphia

Robert Kuttner's comments on why the economy is not heeding Clinton's call are interestingly perceptive.

The Clinton economic program is like a jockey who is reining in a fast horse. If you want to see the horse go, then adopt the 2% solution—the limit on increased government spending that was proposed for the Bush tax increase a couple of years ago, then dropped. As for the revenue side, slap on a gasoline tax now to take advantage of lower crude oil prices. If you want to hit the jackpot on revenue increments, pare the 28% capital-gains tax to 20% for the next calendar year, and let it rise 2% each year until it gets back to 28%.

Daniel A. Bruno
Flushing, N.Y.

GARZARELLI'S FOLLOWERS ARE STILL AHEAD OF THE GAME

In "But what have you done for us lately?" (Finance, July 26), Elaine Garzarelli is subjected to standards that very few fund managers could meet. What is most unreasonable is that your flawed comparisons start with 1988 rather than 1987. It is precisely because Garzarelli got out of stocks before the 1987 crash that she could not possibly have gained much from the subsequent rebound. Funds that held stocks through the crash were bound to show big percentage recoveries in 1988-89, but that is quite misleading. If a stock dropped from $20 to $10 in the crash, that was a 50% loss. If it went back up to $15, that was a 50% gain. But Garzarelli's followers were better off getting out at $20.

This year, Garzarelli has been widely accused of being far too bullish on U.S. stocks by many people, myself included. We have been wrong about that, so far, and she has once again been quite right.

Alan Reynolds
Hudson Institute
Indianapolis

FREE TRADE DOESN'T STOP WITH GOODS

I agree wholeheartedly with the premise of your article "Clinton's trade route" (Top of the News, July 26). Skeptics who feared that Clinton's election would result in a revision of our long-held American commitment to free trade have been pleasantly surprised.

One result of Clinton's outspoken commitment to an activist trade policy has been enhanced media coverage and public awareness of the possible benefits of reduced global tariffs, lower subsidies, and freer markets. Yet repeatedly, Americans concentrate solely on the consequences of free trade for the export and import of goods—agricultural commodities, manufactured merchandise, and raw materials. Continually ignored are the potential benefits for booming U.S. service industries, the fastest-growing field of American exports.

Indeed, the seemingly forgotten American service sector plays a vital role in the U.S. economy and its trade position. For 1992, service exports accounted for over one-quarter of the total. Even more startling, the U.S. services-trade surplus of $61 billion offset more than two-thirds of our nation's $96 billion merchandise-trade deficit. I recommend

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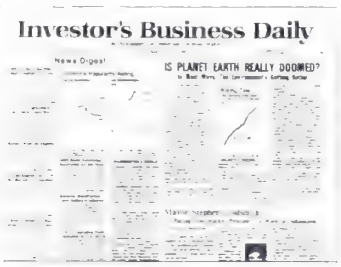

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June 1993

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ıes Lyons, *Smart Money*,
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Readers Repo

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Harry Fre
Chevy Chase

IN THE REALM OF THE CENSUS, POSTCARDS ALONE WON'T DO

Your article, "Postcards from the
sus?" (Top of the News, July
badly mischaracterizes my positio
what the 2000 census should look
I've never advocated a "bare bone
postcard census.

In fact, I recognize that some d
graphic data can only be collect
useful form through the census.
Census Bureau tests show that a
amount of information goes up, ma
sponse goes down, and so does the
racy of the population counts.

This is why we need to gather
of the information in other
throughout the decade. The re
won't just be more accurate popul
numbers. We'll have data that i
more accurate by virtue of timeli
even though it might not look so pr
in terms of geographic detail.

Thomas C. Sa
Chairman, subcommittee on the ce
U. S. House of Representa
Washir

CURES FOR THE DEFICIT MAY BE WORSE THAN THE DISEAS

Congress is having difficulty dec
what to do about the deficit be
many members intuitively sense
both "remedies" offered—reduce the
get or raise taxes—would increase u
ployment and worsen the rece
("Congress should hang tough on d
cuts," Editorials, July 26).

Traditional theory on the subje
that large deficits are bad because
result in excess purchasing power,
ing price inflation. This theory has
thoroughly discredited throughout
past decade: The economy has ope
substantially below capabilities in
of record deficits.

Joseph H. Le
Chatta

Your recommendations for cuttin
deficit have at least one fatal
raising taxes. Since when has ra
taxes ever reduced the deficit?

You discredit the Republicans be
they have "refused to accept any
at all." Raising taxes is what discre
President Bush and helped lead t
defeat.

Charles Foc
Eureka,

ORRECTIONS & CLARIFICATIONS

'The big squeeze on small business-(The Corporation, July 19), the cor- t 1991 sales for Veterinary Centers America Inc. are $14.6 million.

ed on information provided by the npany, "The minivan free-for-all" (In- tries, July 26) misstated the safety tures on Ford Motor Co.'s new ndstar minivan. Ford says the vehi- will comply with all 1994 federal senger-car safety standards, includ- a passenger-side air bag and side- act beams.

TAURUS CAUSE T BULL MARKET?

our report on market professionals who use astrology to help make in- ment decisions ("When Scorpio rises, will fall," Finance, June 14) con- d two short-term predictions that ld debunk this sort of nonsense.

he first quote, concerning June 10, : "Saturn stationary retrograde re to solar eclipse . . . may touch off t money. Restrictions. Depressive ngs. Down!"

o such luck.

he second, about June 24 and the ion of Mars, said: "Bank failures, p market sell-off, tight money, cur- y crises, earthquakes, sunspots!"

ice try.

hese predictions are ridiculous. I believe you printed a serious story his subject. At a minimum, you owe readers a review of such prognosti- ns, so people can see how absurd or gerous it is to make financial deci- s on the basis of astrology. After ou do report on the track records of r, more professional forecasters.

Michael Rancer
San Jose, Calif.

or's note: Traditional performance sures for financial astrologers are ce to nonexistent. One that has a mea- ble record is Crawford's Perspec- s, *quoted above. According to Hul- Financial Services,* Crawford's ed *No. 7 last year among the 65 lead- financial newsletters tracked by Hul- Following* Crawford's *recommenda- during the three-year period ended 31 would have produced a gain of %, vs. 37.2% for the Wilshire 5,000- index. The newsletter ranked No. 4 ng the first quarter of 1993.*

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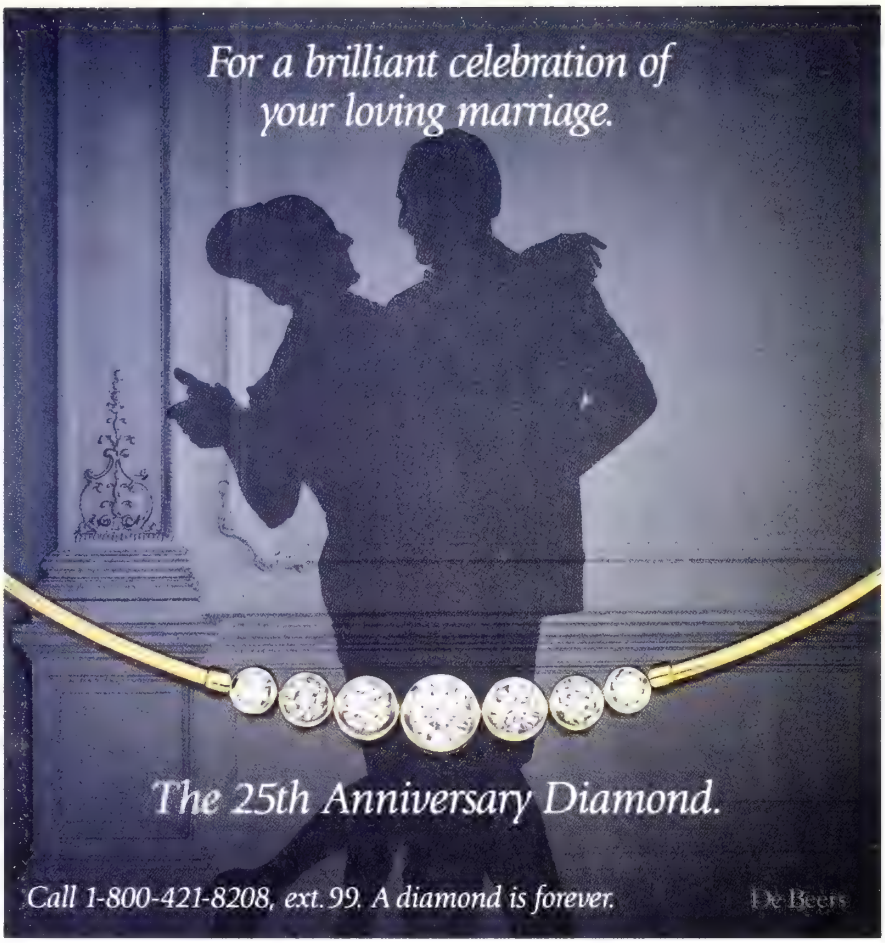

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AGENDA FOR REFORM: THE FUTURE OF EMPLOYMENT RELATIONSHIPS AND THE LAW
By William B. Gould IV
MIT Press • 313 pp • $35

LABOR'S WHITE KNIGHT?

For more than a decade, Corporate America has had virtual carte blanche concerning labor law. President Reagan's appointees to the National Labor Relations Board (NLRB), which enforces the nation's labor legislation, swung the agency sharply toward management. And while the board in recent years has edged back toward the center, it still makes little effort to rein in companies that skirt the law to run roughshod over unions.

This free and easy atmosphere is likely to change dramatically if President Clinton's nominee for NLRB chairman, Stanford law professor William B. Gould IV, gets his way. In a new book, *Agenda for Reform: The Future of Employment Relationships and the Law*, Gould lays out an ambitious plan for revitalizing labor relations in general and the agency he has been named to head in particular. Since Clinton also has the rare chance to fill two more of the board's five seats plus the crucial NLRB General Counsel's slot, Gould will be in a good position to carry out the crackdown that he advocates on management abuses. Still, Gould is no union shill. Previously a lawyer for the United Auto Workers and a New York management law firm, he endorses several key positions supported by management.

Incorporated in *Agenda for Reform* is a detailed overview of how the NLRB has fared in the past decade. The board, Gould laments, has been a focus of union ire ever since Reagan appointed Donald Dotson chairman in 1983. While the agency typically sways right or left with Republican or Democratic Administrations, Dotson went much further, taking aggressively ideological stands favo management.

Current Chairman James Step has been considerably less doctrin But the agency has done little to companies from abusing NLRB rules. instance, it's relatively easy for em ers to manipulate board procedures delay for years a vote to install a u The 1935 Wagner Act, the nation's labor law, "seems wide open to a through delay... and ineffective r dies," writes Gould, and "is now in plete disarray."

To change that, Gould calls for s timetables for handling cases, par larly those involving union recogn elections. He also wants the NLRB t quest more court injunctions aga egregious violations by employers fore cases wind their way through agency's lengthy appeals process. NLRB sought injunctions only 142 t in 1991, he reports, compared with times in 1983. Gould also wants board to order employers to bar with a union that gets less than 50 the vote in a recognition election if agement committed illegal practices deprived the union of a majority.

Some of Gould's other positions

The Car.

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Recently, the Chevy/Delco Electronics team, with help from two-time winner Emerson Fittipaldi and the 93 Marlboro Penske Chevy Indy V8/C, recorded their fifth consecutive Indy 500 victory. The prediction for next year? Déjà Vu.

e labor less happy. argues that unions d be more democrat- they were required ›ld direct, secret-bal- ·lections for officers. ently, most officers elected by delegates convention, which ıs argue is less costly prevents employers exploiting rifts ıg the membership. d also wants to lift ' restrictions on what ıgement can say to oyees to defeat a ı organizing drive. ently, for instance, oyers cannot hold te meetings with employees to per- e them to vote against the union. bor will probably be ambivalent t Gould's view on teams in the place. In two recent cases, one in- ng DuPont Co. and the other a company called Electromation Inc., NLRB ruled that teams set up and by management can run afoul of Wagner Act's ban on company ıs. Those decisions have manage- worried, since a growing number mpanies believe that to compete globally they must use teams to involve workers in decision-making. Business groups have urged Congress to change the law, and Gould agrees. "The principal legal obstacle to labor-management cooperation is the anti-company-union" provision of the Wagner Act, he says.

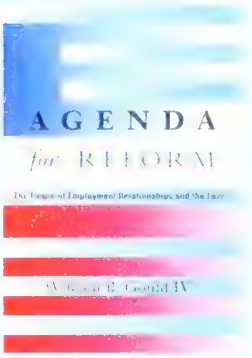
Despite such promanagement positions, Gould wants to see unions revitalized. "The plight of many workers coupled with the inability of unions to represent them at the bargaining table, erodes the fabric of democratic institutions and is profoundly worrisome to all who value a system of checks and balances in the workplace," he writes. To address labor's decline, Gould believes Congress should make it easier for unions to organize new members. He also endorses laws that would bar employers from hiring permanent replacements during strikes because permitting this "simply does not make sense."

Gould, whose Senate confirmation vote is set for September, is unlikely to encounter much resistance from business. For one thing, many of his pro-union views require legislation, so his ability to act on them as NLRB chairman will be limited. But the board can have a tremendous effect on the hard-line antilabor tactics used in the past decade by companies such as Greyhound Corp. and *The Daily News*. Any executive who still believes this approach is best would be well advised to pick up a copy of *Agenda for Reform*.

BY AARON BERNSTEIN

Bernstein is BW's Workplace editor.

Nominee Gould's book gives strong clues to the direction the NLRB will take if he becomes chairman



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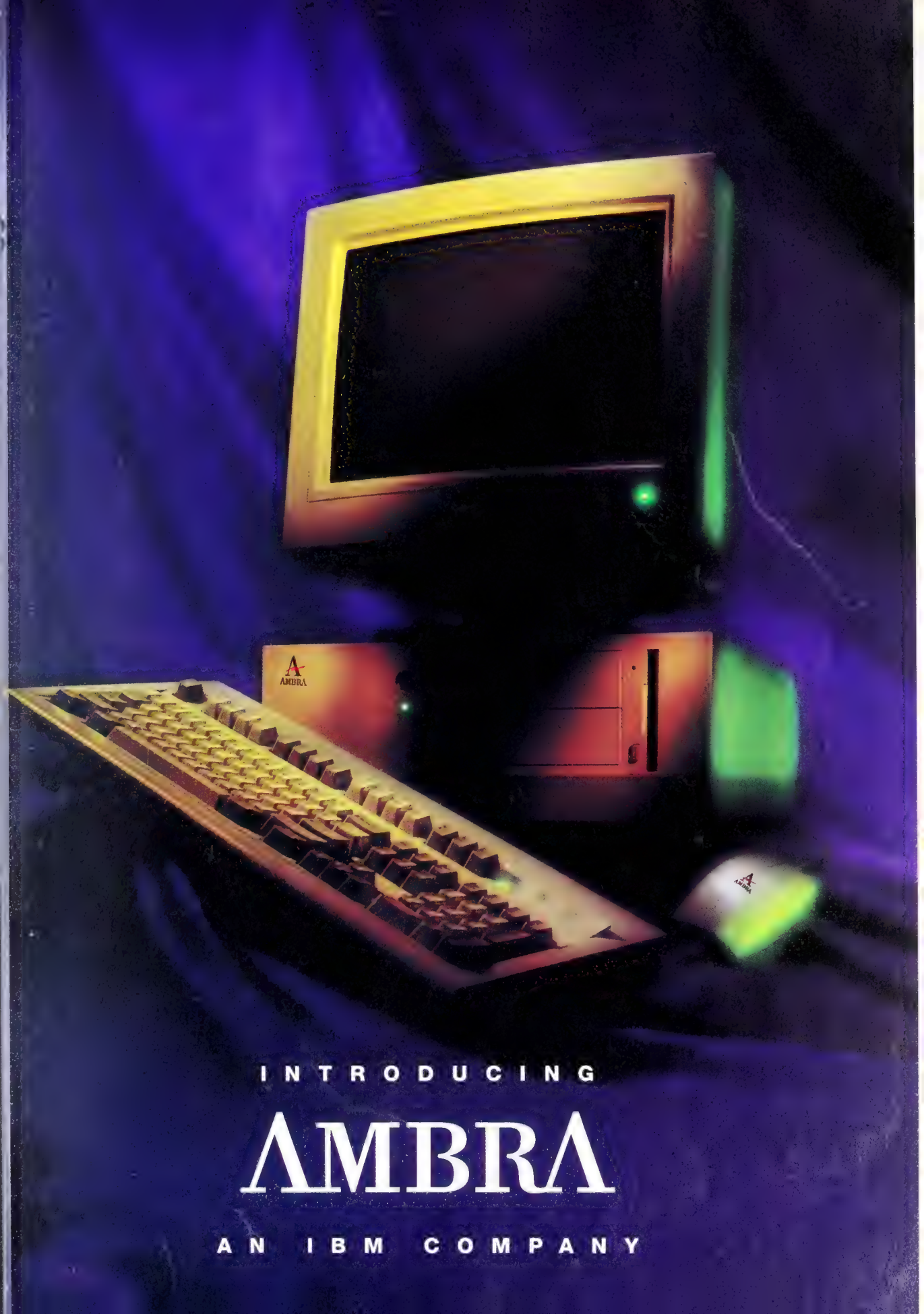
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IE STAYING POWER : LOW INTEREST RATES

DI DORNBUSCH

sive investment ost-communist nomies has not erialized—nor a boom in Japan the West. The kets had better it: Low rates are t of life

RNBUSCH IS PROFESSOR OF MICS AT MASSACHUSETTS E OF TECHNOLOGY

A few years ago, high interest rates seemed a safe prediction for the 1990s. It was assumed that a world boom would take place and that the enormous investment requirements of run-down communist economies would strain capital markets. But no boom occurred: Indeed, the opposite is true.

The silver lining is that the world can expect a period of low interest rates. In the U. S. and Japan, real interest rates are already near zero for short-term debt, although yields on long-term bonds have a great distance to go. The breakup of Europe's exchange rate mechanism frees countries such as France and Spain to pursue competitive interest-rate cuts. Under the pressure of an appreciating currency, even Germany will eventually join in that game.

Massive investment in post-communist economies is simply not happening. Resource flows don't amount to much, because post-communist societies offer far less promising opportunities and bigger risks than were apparent in the immediate aftermath of the fall of communism. Reconstruction will proceed at a moderate pace, with no prospect of a strain on world savings. What investment there is flows to the Czech Republic, Hungary, and Poland. West Germany is investing heavily in its eastern region. There are ambitious plans by industrialized countries to shore up and support reform in Russia by means of a large aid package. But when you add up all these flows, it is hard to reach $200 billion a year—a minuscule sum measured against world savings of some $3.5 trillion.

TOKYO SITS TIGHT. More important, fiscal restraint in Europe and the U. S. will add to the world savings pool. Germany is introducing additional taxes and spending cuts to finance its costs of unification. Italy is pruning its public sector, as are France and most other European economies. In the U. S., the Clinton Administration's fiscal program provides for substantially lower budget deficits over the next few years.

Japan is the only country that has ample room and every reason to go the other way—by introducing fiscal stimulus to move out of recession—but it is refusing to do so. The Finance Ministry, mesmerized by the prospect of an aging population 30 years from now, sits tight and refuses to yield to increasing pressures for a tax cut. So even Japan is doing its share to keep world interest rates low.

World private-investment trends add to an outlook of soft capital markets and low interest rates. European economies are in a deep recession that will last well into 1994 and perhaps beyond. No chance there for an investment boom. In the U. S., investment in plant and equipment is doing well, but only when judged against the abysmal record of the 1980s. But the overhang of commercial real estate—the aftermath of the 1980s—limits the scope for investment revival. Japan, with its recession, bankrupt banks, and businesses strained by poor growth prospects and the collapse of asset prices, is most unlikely to see an investment boom. Finally China, so much in the news now because of its extraordinary growth, should begin to cool off soon, as officials try to counter uncomfortably high inflation.

SKEPTICAL MARKETS. All of this suggests interest rates will keep moving lower. Just how low is best judged from the historical record. The real yield on U. S. Treasury bills in the 50 years from 1930 to 1980 barely averaged zero. In the 1980s, with the fight against inflation, massive fiscal expansion, huge consumer borrowing, and the public-works program in commercial real estate now known as the savings and loan crisis, bill yields rose to an average of 3.5%. But the 1980s were atypical, and the rest of the 1990s will be more in line with the historical record. Real interest rates on long-term debt averaged just above 1% in the five decades before 1980. We should expect rates to head in that direction. There is still a ways to go, with long-term rates still just under 7% and inflation well below 4%.

The working assumption of capital markets continues to be that inflation is taking a cyclical holiday and is bound to return, as continued growth tightens labor markets and pushes up capacity utilization. Budget-tightening proposals are not taken seriously, either because there is doubt that they will actually be enacted or because of the belief that even if passed, as was the Gramm-Rudman Act, they will not be implemented. The most skeptical capital market will ultimately have to come to terms with the facts. In the 1970s, the market was slow to recognize a decade of very high inflation. Today, it is overly slow to accept a decade of low inflation and the increasing prospect of sluggish growth for the world.

Capital markets are reluctant to accept the message because they have been disappointed too often; they expect bad news to jump at them from behind every tree. Luigi Einaudi, Italy's great postwar leader, said the capital market has the memory of an elephant, the legs of a hare, and the heart of a deer. With continued good inflation performance and firm, substantial budget cuts, lenders will grudgingly back away from the 1980s experience and accept historically low rates, which are the counterpart of a world economy that is not doing well.

BY GENE KORETZ

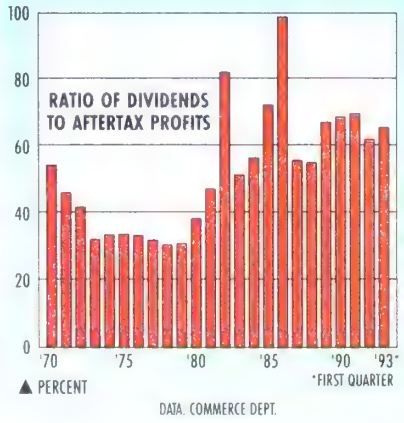
IN AMERICA, THE DAYS OF BIG DIVIDENDS MAY BE NUMBERED . . .

Throughout the postwar period, U. S. companies have tended to pay out more of their profits in dividends than their foreign competitors—a tendency that is partly reflected in higher savings rates overseas. But since the early 1980s, as economist Joseph Ford of WEFA Group observes, Corporate America has been distributing even more of its profits than in the past (chart).

Such a high payout policy may please many shareholders, but its long-run implications seem ominous. For companies to retain less for investment hardly bodes well for productivity and growth.

Ford thinks two legacies of the 1980s are partly to blame for the trend. The first is the hostile-takeover binge. To ward off raiders, he says, "many corporate financial officers inflated dividend payments in the hopes of encouraging stockholders to resist the overtures of takeover artists."

U.S. DIVIDENDS HAVE BEEN UNUSUALLY HIGH



DATA: COMMERCE DEPT.

The second is the change in capital-gains taxes. Prior to 1987, capital gains were taxed at a lower rate than ordinary income—encouraging stockholders to forgo dividends in favor of future gains. By eliminating the big gap between the rates, the 1986 tax-reform act reduced the incentive for managers to reinvest earnings in the business.

But while these developments may have fostered generous dividend payouts, economist Rosanne Cahn of First Boston Corp. argues that the main cause has been a less promising business environment. Rather than the "fat years," she says, the 1980s were actually a period of lower profitability than earlier decades. And her analysis of dividend policies shows that industries with the worst profit performance tended to raise payouts the most.

"Lacking investment opportunities offering competitive returns," says Cahn, "companies with poor profit margins have responded rationally by slowly shrinking their operations via high dividend payments." The good news, she adds, is that this process may be drawing to an end. Once the global economy turns up, the prospect of growing demand in the face of a leaner U. S. industrial base suggests that companies will want to hang on to more of their profits to invest for the long haul.

. . . WHILE JAPAN MUST SCRAMBLE TO MAINTAIN ITS PUNY PAYOUTS

If U. S. dividends have been historically high recently, in Japan they have been low—as a share both of profits and of stock prices. Indeed, according to Steven H. Nagorney, global investment strategist at Lehman Brothers Inc., the frugal dividend policies of Japanese companies, combined with current economic woes, have placed them in a bind.

Nagorney points out that dividend yields in Japan averaged 5.1% and 2.6% in the 1960s and 1970s, respectively, as corporate profits grew at double-digit rates. But in the 1980s, when profit growth slowed to 9% a year, dividends fell to 1.2%. Now, profits have declined for four straight years, and yields on Japanese stocks have dipped below 1%.

To keep stock prices from falling, says Nagorney, Japanese companies will have to maintain dividends at close to current levels. But that will require profits to start growing again, and the only way Japanese companies seem able to boost growth in today's parlous economic climate is to cut costs dramatically. "The layoffs and cutbacks we've seen in some Japanese companies," he says, "may be only the beginning."

AN ASIAN TIGER CUB SHARPENS ITS CLAWS

Here's a riddle: Name a country whose growth has averaged 10% over the last five years, whose consumer prices are up only 2.8% over the past 12 months, whose wholesale prices have declined 1.3%, whose currency has been stable against the dollar for more than seven years, and whose investment year came to nearly 38% of GDP.

The answer is Thailand, and accor to economist Lawrence A. Kudlov Bear, Stearns & Co., its sound econ policies suggest that it will follow fast track of its Asian Tiger neigh Kudlow points out, for example, the government spends only 17% of and consistently runs a budget sur which hit 2.5% of GDP last year.

As for taxes, capital gains on st are tax-free, and social security co butions, shared by workers and em ers, are only 3% of wages. The top vidual income-tax rate is 37% on inc over $160,000, and the corporate rate is cut from 35% to 30% if a co ny is listed on the stock exchange.

Thailand has a big trade deficit, Kudlow thinks its attractive investm climate will let it keep expanding without relying on an export-led p that suppresses imports. "Low infla a strong, stable currency, an ope nancial system, and low tax rates enable Thailand to follow the Hong K and Singapore fast-growth model high investment rates and balanced pansion of imports and exports," he s

NURSING HOMES MAY NOT BE THE LAST RESORT

It may be possible to get adult chil to share more of the burden of ca for their elderly parents—and thus er the government's bill for nurs home care. In a recent National Bu of Economic study comparing Medic sponsored nursing-home programs in ferent states, David Cutler and Lo Sheiner found that the more liberal rules governing such care, the more erly people made use of the ho States that subsidized care for highe come individuals had higher rates of than stricter states. So did states payments to homes closer to the ste fees charged to private patients.

The economists' most surprising ing, however, was that states with generous policies actually had mor their elderly living with their child They conclude that "most of the eld currently in government-financed nur homes otherwise would be living their children, not by themselves." America's nursing-home bill already suming 1% of gross domestic pro and headed for explosive growth, findings suggest that policymakers have more leeway than they suspe in designing programs to minimize social and economic costs.

ST 16, 1993

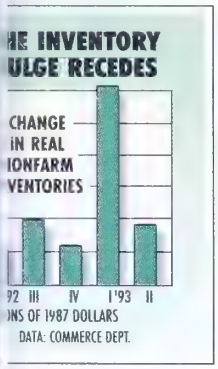
BY JAMES C. COOPER AND KATHLEEN MADIGAN

OSEN YOUR SEAT BELT, IE SECOND HALF SHOULD BE A SMOOTHER RIDE

lan Greenspan the economist well understands the perils of forecasting. But Greenspan the Federal Reserve Board chairman apparently doesn't. old Congress on July 20 that growth in second-quarter gross domestic product "clearly has run in excess %." On July 29, the Commerce Dept. reported that GDP rose a lackluster 1.6%.

e chairman's flub, however, may look less embarg after future revisions, including Commerce's annunchmarking due on Aug. 31. Several sectors—among consumer spending, housing, equipment investment, he trade deficit—were improving toward the end of uarter. That suggests an upward revision.

Greenspan's credit, though, the tone of the GDP re- is far more upbeat than the top-line number suggests. t, the breakdown between demand and inventories gly suggests that the economy is poised for second- growth in the neighborhood of 3.5%.



Looking further ahead, the outlook for 1994 is now a shade brighter as well, because the upheaval in Europe's exchange-rate mechanism all but guarantees lower European interest rates (page 42). That's bullish not only for European growth but also for U. S. exports and manufacturing.

Stronger foreign demand will provide yet another offset to the contractionary impact of the Clin- Administration's deficit-cutting budget proposals. s in addition to the sizable stimulus to domestic ling from the drop in long-term interest rates so is year, much of which has yet to percolate its way gh the economy.

MAND LLIED ST ARTER

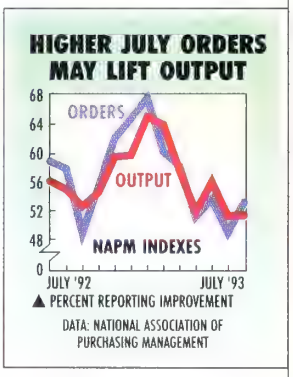
For the rest of 1993, the upbeat implications in the second-quarter GDP report are hard to deny. For starters, final demand—the sum of spending by consumers, ess, government, and foreigners—rose at an annual of 3.7%, more than reversing the 1.2% drop in the quarter.

a result, the ominous first-quarter bulge in inventoall but evaporated (chart). That means most of the cks in orders and output that were necessary to tockpiles down to size are now complete.

e implication is that second-half output is free to in line with demand, which appears to be back on a solid footing. Manufacturing will reap the benefits. Factories have been in a slump in recent months, partly reflecting the inventory correction.

In particular, auto production is ready to make a big contribution to factory output. After rising at an annual rate of $16.8 billion in the first quarter, car dealers' inventories fell by $6.9 billion in the second. That swing alone accounted for all of last quarter's slower pace of inventory growth, and it opens the way for Detroit to rev up for its robust third-quarter production schedule.

Already, the government's reading of June factory orders has shown some bounce, and for July, the National Association of Purchasing Management had more good news. The NAPM's index of industrial activity rose to 49.5% last month, up from 48.3% in June. The overall index remained just below the 50% line dividing expansion from contraction, but the orders index jumped to 53.1%, from 49% in June (chart).



For now, though, manufacturing's depressing influence continues to show up in the data. The government's index of leading indicators, for example, is heavily weighted toward factories. In June, the index rose only 0.1%. Although that's an improvement over the 0.4% drop in May, the index is still 1% below its February peak—about the time manufacturing began to weaken.

TRADE LOOKS LIKE A NET ZERO

Demand strengthened in nearly all major sectors last quarter except defense and net exports, which remained weak. But even on the trade front, exports advanced at a healthy 6.7% annual rate, despite slumps in Europe and Japan. But rising imports washed out that gain.

In the second half, weakness abroad will limit export growth, but the pace of imports should slow, given their sharp acceleration in the first half. Trade looks like a net zero for growth, but that's an improvement over the first half, when a wider deficit lopped nearly a full percentage point from real GDP growth.

Three clear contributors this half will be consumer spending, housing, and business investment in equipment. In particular, equipment outlays will continue to be a growth leader. They rose at an annual rate of 16.5% last quarter, equal to the average advance for the past five

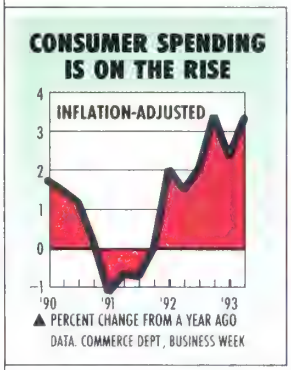
quarters. Where's the money going? The highest priority on companies' capital budgets is spending for information processing and other high-tech machinery, which is aimed at cutting costs and improving productivity. Low interest rates and rising profits will continue to fuel the investment boom.

One surprise in the GDP data was a stronger-than-expected performance by consumers. Real spending grew at an annual rate of 3.8% last quarter, compared with a rise of just 0.8% in the first. In June alone, inflation-adjusted outlays increased 0.6%. Over the past year, consumer spending is up 3.3% (chart), and an essential ingredient in the second-half outlook is that shoppers maintain that healthy buying rate.

PUBLIC SENTIMENT: HAVE JOB, WILL SHOP

For now, the signs suggest that consumers will carry the ball in the second half, because future job and income growth will be more in line with spending gains. In the first half, outlays rose at an annual rate of 2.1%, but real aftertax income grew by half that pace.

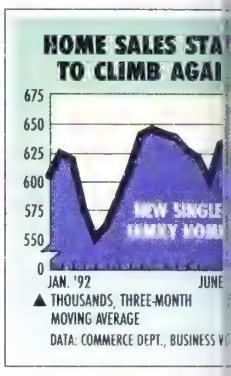
Over the next six months, though, payrolls should grow by an additional 1 million jobs, or a shade faster than the 1.8% growth rate in the first half. And because wage gains have firmed up in recent months, real aftertax income will advance a bit faster than its 1% rate in the first half. The combination of more hiring and better pay means that income growth will be strong enough to support consumer spending growth in the 3%-to-3½% range in coming quarters.



One beneficiary of the stronger consumer fundamentals is the housing industry, and that won't change. New single-family home sales rose by 11% in June, to an annual rate of 678,000 (chart). And mortgage applications v strong in July, thanks to lower rates.

Homebuilding was a drag on the second-quarter GD tal, falling at a 9.5% annual rate. But that weakness the result of the harsh winter, which curtailed hou starts in the first half. Now that demand has picked inventories of unsold homes are low, and construc will be a plus in the second half.

Nonresidential building won't fare as well. High cancy rates for offices and low factory operating rates will keep investment in business structures down. Outlays rose at a 4.8% annual rate in the second quarter—perhaps a sign that the three-year slump in this sector may be bottoming out. But outlays are still 2.3% below their year-ago level.



Looking at recent monthly data, however, the construction industry overall may have been a bit busier last qua than first measured. Spending rose by a strong 1.2 June. And May's numbers were revised up to show a rise instead of 0.4%. Also, contracts for future buil jumped 13% in June, according to F.W. Dodge Grou McGraw-Hill Inc. That was the largest gain in 1½ ye

Public-works projects accounted for most of the Jun crease and the May revision. That spending sugg that government purchases, up only 0.5% last qua may actually have added more to GDP growth.

Whether or not future GDP revisions vindi Greenspan's off-center forecast for the second qua the real issue is the second half. Right now, two th seem clear about the rest of 1993: One, Greenspan w be tossing out too many forecast numbers. And based on the evidence so far, growth is shaping up t a lot better than it was in the first half.

THE WEEK AHEAD

PRODUCTIVITY AND COSTS

Tuesday, Aug. 10, 10 a.m.
Output per hour worked in the nonfarm sector likely fell at an annual rate of 1.5% in the second quarter, after dropping by 1.8% in the first period. That's the median forecast of economists surveyed by MMS International, a division of McGraw-Hill Inc. Last quarter, total hours worked probably rose at about a 4.1% annual pace, while nonfarm output, as indicated by the gross domestic product, grew by less than 2%. If the forecasters are right, it would be the first two-quarter drop in productivity in more than two years. The efficiency slump, along with a rise in compensation, probably means that unit labor costs grew at an annual rate of about 5%, the same as the first-quarter pace.

PRODUCER PRICE INDEX

Thursday, Aug. 12, 8:30 a.m.
Producer prices of finished goods were likely unchanged in July, after falling 0.3% in June. Lower energy prices offset increases elsewhere. Excluding food and energy, producer prices probably rose 0.2% in July, after falling 0.1% in June.

RETAIL SALES

Thursday, Aug. 12, 8:30 a.m.
Weak car buying probably meant retail sales increased little in July, says the MMS survey. But excluding cars, receipts probably rose a respectable 0.4%, despite a drag in shopping caused by the floods in the Midwest and the heat w in the East. In June, total sales vanced 0.4%, and 0.2% excluding ca

CONSUMER PRICE INDEX

Friday, Aug. 13, 8:30 a.m.
Consumer prices likely edged up 0.2 July, as inflation continues to mode In June, prices were unchanged i May. The expected July increase m the yearly inflation rate would dip b 3% for the first time in 18 months.

BUSINESS INVENTORIES

Friday, Aug. 13, 10 a.m.
Business inventories probably fel 0.1% in June, after rising 0.2% in M Strong car buying last quarter helpe clear out car dealers' lots.

ERIC HOFFMANN/BW

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THE ECONOMY

AUGUST 16, 1993

THE RISK CLINTON FACES

LOWER RATES MAY NOT OFFSET A DRAG ON GROWTH

He had to ditch his call for a middle-class tax cut and his campaign vow to fight higher gasoline taxes. His plan to supercharge the economy through public investment was drastically scaled back. And his dream of universal health-care coverage had to be deferred. But after a bruising six-month struggle with Congress, it looks as if Bill Clinton will emerge with a $496 billion deficit-cutting plan that he hopes will cement his claim to be "a different kind of Democrat."

Who would have guessed it would turn out this way? During his run for the White House, Clinton downplayed budget-cutting. Instead, he talked of an activist government that would spur economic growth. Listen to the deficit hawk now, in his Aug. 3 address to the nation: "Without deficit reduction, we cannot have sustained economic growth." And though he was twisting arms for support right up to a scheduled Aug. 6 Senate showdown to nail down wavering votes, as BUSINESS WEEK went to press the President appeared to have the votes to get his package passed.

Clinton, however, is running a major risk: As necessary as it may be, his deficit-cutting could become a major drag on the economy, perhaps as early as next year. The danger is that low interest rates won't be enough to offset the major economic drag from cutting the deficit through higher taxes and lower spending.

The Clintonites think they have that covered. They argue that a 1.2 percentage-point drop in long-term interest rates since the President started talking tough about the deficit has already helped spur the economy. And Clinton thinks that enactment of his plan could knock ra down a bit more (page 24). That me lower borrowing costs for business cheaper capital for new investme Treasury Secretary Lloyd Bentsen gues that each percentage-point drop rates equals $100 billion in econo stimulus over three years.

Indeed, Clinton's accomplishment real. The Administration estimates plan would trim the deficit from arou 5% of gross domestic product now around 3%. "A lot of people have b disappointed by how small the ba package is, but when you look at incredible difficulties and bickering C ton faced in just passing this progra you begin to realize that anything m ambitious was probably impossibl says Brookings Institution econo Barry P. Bosworth.

Yet the Clinton program clearly has

CONGRESS' BUDGET: THE ECONOMIC HIT

How the central measures of the 1993-94 federal budget will affect the economy over the next two years:

PERSONAL TAXES

Higher marginal rates for high-income individuals; 4.3¢-per-gallon gasoline tax hike; increase in Medicare payroll tax on the wealthy; tax on upper-income Social Security recipients.

LIKELY RESULT Lower private savings, investment, and consumption.

CORPORATE TAXES

Increase in top rate from 35% to 36% for income above $10 million. Tightening of rules on taxation of foreign source income.

LIKELY RESULT Reduction in corporate retained earnings and investment. Multinationals will invest more profits abroad.

equacies. Even with its savings, di- d roughly between tax increases and ıding cuts, the annual red ink will $1 trillion to the national debt over next four years. For 1998, the feder- leficit is projected at $170 billion, n from $300 billion without the pack- After that, the Administration ad- , the deficit begins to rise again as lement spending and debt-service s outstrip revenues. Clinton is count- on savings generated by health-care rm (page 26) to be his next line of nse against a rising deficit at the of the decade. But most econo- s—and even some stalwart Demo- s such as New Jersey Senator Bill lley (page 25)—agree that it's only a er of time before another major def- icit-reduction effort will be needed.

Clinton had greater things in mind when he started out. In his proposal of last February, he countered the drag of budget cuts with a $30 billion stimulus program, including $16 billion in spending and a temporary investment tax credit. But the ITC found sparse support on Capitol Hill, and a GOP filibuster killed the new spending in the Senate.

Without that boost, the economy faces a rough road. Growth has been far below expectations, running at a 1.2% annual rate in the first half. The Administration is preparing to lower its overly optimistic estimates for growth to less than 2.5% for the year. That rate probably means job creation will fall short of the number of people entering the labor market. Add a five-year, $127 billion cut in the Pentagon's spending, throw in a tax increase, and the austerity plan may begin to bite. Long-term rates may even inch down further if the bill passes, easing the pain a bit. Still, "Clinton is raising the tax component of the cost of capital and putting the economy on a lower growth track," insists supply-side economist Stephen J. Entin of the Institute for Research on the Economics of Taxation.

The biggest economic risk comes from provisions that haven't changed since the initial draft: the hefty tax increases on high-income individuals. Clinton's budget cuts and the gasoline tax will kick in over coming months and years. But the increase in taxes on the richest Americans is retroactive to Jan. 1, 1993. Although the tax hike hits just 1.2% of individuals and 4.2% of small businesses, this sliver of the economic pie is responsible for much of the nation's savings, investment, and job creation. "A relatively few small businesses may be affected, but they tend to be the ones employing the most people and with the potential to hire more as they grow," says Gillian Spooner, a partner at KPMG Peat Marwick.

Recognizing this, the White House acted on Aug. 4 to soften the blow: Payments for the 1993 tax increase can be spread out over 24 months, with only the first third of the extra income taxes due next April. The next two installments would be due the two subsequent Aprils. For example, according to a Price Waterhouse study, a couple with a gross income of $300,000 would owe $6,424 more in taxes in 1993 as a result of the Clinton budget package, for a total federal tax liability of $79,784. But $4,283 of that tax could be deferred until the two following years without penalty.

Democrats, who've been waiting 12 years to roll back Reaganomics, obviously feel they've found the formula to do it. Individuals with taxable incomes over $115,000 and couples making over $140,000 will see their marginal tax rate jump from 31% to 36%. Taxpayers pulling down more than $250,000 a year will be hit with a 10% surtax. In addition, the $135,000 cap on the 2.9% Medicare payroll tax is eliminated. Combining all the new levies, the maximum federal marginal rate will rise to an effective 44% from around 33%.

Targeting the rich allowed the White House to declare that 80% of all new taxes would be shouldered by those making more than $200,000. And there's help for those at the bottom of the ladder—a $19.1 billion increase in the earned-income tax credit for the working poor. Meanwhile, the

EARNED INCOME CREDIT

Expansion of refundable tax credit for low-wage workers by $20.8 billion over five years.

LIKELY RESULT Boost in wages of the working poor with children living at home, pushing those families above the poverty line.

TAX BREAKS

New passive loss deductions for real estate professionals, depreciation breaks on intangible assets, and bigger allowances for charitable deductions.

LIKELY RESULT More tax shelters, more mergers and acquisitions in industries such as insurance and entertainment.

middle class largely escaped new taxes. Only a 4.3¢-per-gallon rise in the gasoline tax and a hike in the tax rate on upper-income Social Security recipients will affect the middle class.

Of course, the news is not all grim for business or the wealthy. Under the compromise plan, corporations will see their tax rates rise by just one percentage point on earnings over $10 million, half the increase sought by the Administration. Congress eased proposed tax hikes on multinational corporations. Some real estate professionals will be able to write off "passive investment" losses against regular income, just as they could before the 1986 tax reform.

There's little unbridled enthusiasm for Clinton's plan. "It's not close to what we really need in terms of deficit reduction in the long run," allows John P. Wh of Harvard's John F. Kennedy Schoo Government. And it may be a while fore the economy starts percolat Merely avoiding disaster wasn't w Clinton promised during his campaig what he expected when he revealed plan last winter. But now he and nation at least have a start on that t

By Paul Magnusson in Washing

'ON BALANCE, IT'S STILL THE BILL THAT I STARTED WITH'

On the eve of a climactic vote on his economic plan, President Clinton took time out to meet with BUSINESS WEEK reporters for a freewheeling discussion on the economy. Nervous White House aides were still scurrying to round up votes for the plan on Aug. 4 when Clinton, hoarse and obviously weary from months of Capitol Hill brinkmanship, talked with Washington Senior Editor Lee Walczak and White House Correspondent Susan B. Garland.

On the possibility the budget could trigger another dip in interest rates:

"I think we'll get some further decline, until we get enough economic growth to make people worry again about inflation . . . if we got up to 4% growth or so."

On talk the entitlement budget will be cut more:

"It not only could, but it should. . . . We must deal with entitlements, especially Medicare and Medicaid. If we don't, in a few years, being in Congress will be a matter of just writing checks for more of the same health care and of paying interest on the debt. We have cut defense all we can, and we've put a freeze on aggregate domestic spending. Entitlements, especially health care—that's the next step."

On the notion that hiking taxes on the rich won't slow job creation:

"Keeping interest rates low would bring more money to many wealthy people than they would lose in higher taxes. We tried the low-tax, high-deficit strategy, and it only worked for a couple of years in the early '80s. But for the last several years, because of this debt overhang, our ability to generate new jobs has been severely limited. If we're looking at the long haul, we have to take some structural actions to take this deficit down."

On chances the budget's modest investment incentives could work:

"They're pretty sharply targeted toward the people who are most likely to create jobs. . . . Do I wish there were more tax incentives in there? Of course I do, and we may be able to do more in time, depending on how well we do with economic growth. [But] I felt that in cutting all these other programs, I had to be willing to scale back my own investment plans if we were going to have a deficit program that had credibility."

On openly bartering for Hill votes:

"Bismarck said that the two things people should never have to see is sausage and laws being made. This [horse-trading] happened in some measure because the Republicans essentially went on strike. That led to a lot of changes. To be fair, I think a lot of them were good changes. We wound up with more spending cuts, fewer taxes, and a more progressive tax code. In the conference, there are some things I didn't like so much. But on balance, it's still the bill that I started wit

On the risk that deficit reduction co depress an already weakened econo

"There are really two reasons we cided in this period of slow growth th we could risk a serious deficit-red tion package. One is, I'm not su there ever was going to be a go time. All the wealthy countries ha had difficulty creating jobs, and t deficit itself has been a big drag global growth. Second, since long-te interest rates have been quite hig there was a real chance that you wo get enough refinancing of home mo gages and busine loans—and the subs quent reinvestment— offset the [plan's] co tractionary effect."

On wooing Ross Pero backers:

"A lot of them rea care about the defi and when they see th this is a serious plan th brings the deficit dow they'll be for it. [Ma don't like the Repu cans but believe the rh oric that this had spending cuts, all midd class taxes. When t plan passes, rhetoric w give way to reality. And we've be working hard for the kind of politi reforms that [Perot voters] passiona ly want. These folks are genuin alienated. They're going to take so selling."

On prospects for the North Americ Free Trade Agreement:

"We've got a shot at NAFTA. We going to have to win the battle of t facts on the job issue. The argum against [NAFTA] in a nation where m Americans are working harder for l is so much more powerful than t argument for it."

HIS WAS NOT WHAT YOU'D ALL A PRINCIPLED DEBATE'

Bradley talks about the congressional budget compromise

ident Clinton and exhausted Demtic congressional leaders may be thing a bit easier, in anticipation inal passage of the Administra's battered deficit-reduction pack But what's that sound emanating the office of Senator Bill Brad Sounds a lot like a Bronx cheer. e New Jersey Democrat, a member e House-Senate conference comze that struggled to meld competversions of the Clinton program, that the exercise fell short of what was ed to make a big dent e deficit. In an unlly blunt interview BUSINESS WEEK Edin-Chief Stephen B. ard, Washington-l Senior Editor Lee zak, and Congressio-Correspondent Rich-S. Dunham, Bradley harsh words for his v lawmakers and the dent. His warning: use of the plan's comings, "we'll have me back for more" ding cuts soon.

w do you assess the romise on the Clinudget?

ve the Administration for backing the big-deficit-reduction package in .... [But what emerged] could been better and should have been r.... It's symptomatic of an unwillss to confront reality. That means to get what the President wanted, was more jobs and higher wages, equire some more [cutting]. We're to be back here for Act II.

nocrats control Congress and the House. Why was this so hard?

ple didn't clearly understand the n economic plan. They focused on t reduction, but there was no prin that informed the deficit reduction. ve cutting the deficit on the basis come, which implies some kind of s testing? Do we think people a certain income category should nore taxes? There's a little bit of both. Do we want the market to allocate resources instead of government? If that's the case, you should eliminate tax and spending subsidies [rather than creating new ones], and we're doing a little bit of both there, too.

Q *There sure seemed to be a lot of unseemly dealmaking going on...*

A It was like a giant bazaar.... This was not what you'd call a principled debate. I mean, how many head of cattle do you trade for a good horse? That's what this thing was about.

"It's not correct to demonize the successful. Because you've done well and earned money doesn't mean that you are guilty of something"

Q *Why was Congress so reluctant to enact anything other than a small hike in the gasoline tax? Is the gas tax such a hard sell?*

A The reason this can't be sold is that the President said [in the campaign] that he didn't want to do it.... It's a missed opportunity.

Q *What else about the budget package particularly disappointed you?*

A Not having anything systematic on [curbing] entitlements is a tremendous lost opportunity. You've got to do something directly on entitlements, probably in 1995. Means testing is the way to go in some areas, such as federal pensions. On things like farming, you want to limit subsidies.... And we need the line-item veto.

Q *To get back to your idea that additional deficit cuts will be needed, how would President Clinton manage this?*

A I think his next deficit-reduction program is going to be his health-care program. And that implies some rather stark actions.

Q *The economic plan raises tax rates on the wealthy, mostly under the guise of "fairness." Your view?*

A That's not the explanation I would have used. It's not correct to demonize the successful. Because you've done well and earned money doesn't mean that you are guilty of something. It means you worked hard and beat the competition—and were rewarded for it. To say that you got unjust gains in the 1980s, and now we're taking them back, is really shortsighted.

Q *But shouldn't the rich pay more?*

A They have to be asked to do this as part of a national commitment to deal with the deficit. And how you do it is not by raising rates and putting back loopholes but by limiting the value of deductions—for example, for people who have $500,000 mortages on their homes. But of course, that doesn't serve the [political] purpose. The purpose is to say you socked the rich. But [by hiking rates], the Clinton program risks the following: It will not raise the projected revenue, because the rich will avoid paying taxes through shelters. Therefore, it will not produce the economic bump people think it will.

Q *Administration economists lament that the final package doesn't contain full funding for the investment incentives Clinton wanted. Is this justified?*

A If you totaled all these things up, from expensing to the capital-gains cut for small business, you'd be under $10 billion. And that is going to make a difference in a $6 trillion economy? Give me a break! That's not even symbolism. It's a total giveaway, a gift to different constituencies. Will it have an impact on the economy? Zero.

A.EA QUESADA, MATRIX

HEALTH CARE

IS THERE AN ACCOUNTANT IN THE HOUSE?

Clinton's team says its health plan can pay for itself. That's a stretch

When candidate Bill Clinton unveiled his health-care plan last fall, he claimed the savings generated by reform could pay for medical coverage for all Americans—with money to spare. "We can cover every American with the money we're already spending," he said, and "save hundreds of billions of dollars for the private sector." But under President Clinton, the emphasis seemed to change. Leaks about generous benefits and coverage for the poor led to projections that the overhaul plan would require up to $90 billion a year in new taxes—numbers that sent business to the barricades.

Now, six weeks before Clinton is scheduled to take his plan public, the idea of self-financing reform is back. White House economic advisers panicked when they saw the costs of the new social program promoted by Hillary Rodham Clinton and sent the health team back to draft a cheaper version. Now, such costly benefits as mental-health coverage have been trimmed. And the Administration insists its plan will save enough money to insure all Americans with just one new revenue source—$15 billion in higher taxes on cigarettes and alcohol.

"TROUBLE." The Administration hopes its renewed emphasis on cost containment will rekindle Corporate America's enthusiasm for reform. But it may be disappointed. Health analysts question whether the Clinton team's math adds up. Clinton has "pretty substantial trouble with these numbers," says John F. Sheils, an economist with Lewin/VHI, a health consulting firm in Fairfax, Va.

Business may have other gripes. Small companies oppose the mandate that all employers buy coverage for their workers. And big companies may be wary, too, though the Administration has sweetened the plan by dropping a proposal to replace health premiums with a payroll tax—and by letting large companies continue to run their own benefit plans. "Employers don't want to pay for a system if they don't have much influence over how it's run," says James A. Klein, executive director of the Association of Private Pension & Welfare Plans.

Clinton's plan is still built around managed competition, the blueprint he embraced during the campaign. The system would be dominated by state-run purchasing cooperatives called health alliances. Families would pick their coverage through the alliances, choosing a "managed care" network of providers or a traditional insurance plan. Each plan would offer a standard package of benefits. Employers would pay at least 80% of the average premium for their region, with employees picking up the rest with pretax dollars. Washington would su dize premiums for low-wage work and buy coverage for the unemploye

The White House has decided to large employers—probably those w 5,000 or more employees—run their o health plans. That's good news to M garet H. Jordan, vice-president at Sou ern California Edison Co. "We run very effective health program, and makes no sense to push us into an tested cooperative," she says.

SPEND AND TAX. White House staff are gambling that competition amo health networks will help squeeze co out of the system. But if that's enough, a cap on premiums—wh would be allowed to grow no faster th the economy by the late 1990s—is signed to force savings.

It's those savings the Administrat figures will pay for universal covera Employers would p up premiums for wo ers who now rece Medicaid and Me care—saving about $ billion. The scheme a envisions capping p miums so that the U would spend $22 bill less than projected cover the uninsured. costs come under c trol, families and bu nesses would have m income—and pay $ billion more in taxes

A pipe dream? Hea analysts think so. H pitals project their " compensated care" be $13 billion in 19 far short of the Adm istration's $22 bill figure. In the short r requiring employers provide coverage w cut profits and red the tax take. Long term savings wo come from reducing incomes of doctors a other health worker whose lower ta would offset much the added revenues from employ whose health costs have dropped.

White House aides insist that th seven-month study of the health syst shows that the savings can be captur They'd better hope so. After a bruis budget battle, the President is in no p tion to pitch a health plan that will quire yet another round of tax hikes his savings estimates go up in smoke, may his whole health-reform dream.

By Mike McNamee in Washing

THE SOCAL EDISON CLINIC: NO CHANGE PLANNED

FUNDING HEALTH REFORM: CLINTON'S PLAN

SOURCE	ANNUAL AMOUNT Billions
Tax hikes on cigarettes and alcohol	$15
Savings from Medicaid and Medicare	$19
Savings on coverage for the uninsured	$22
Higher tax revenues as profits reflect lower health costs	$19

DATA: BUSINESS WEEK

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TRENDS

PHILIPE VAN ITALLIE TOOK IBM'S BUYOUT OFFER BUT WOULD RATHER HAVE STAYED ON

TAKE THE MONEY AND RUN —OR TAKE YOUR CHANCES

Early retirement offers uncertain rewards to employers and employees

To many, the news hit like a punch to the gut: Last spring, 10,000 employees at IBM's East Fishkill (N. Y.) semiconductor plant learned that half of their number soon would be let go. But Philipe Van Itallie, a 50-year-old manufacturing systems engineer, wasn't so nervous: With 25 years' experience, he could retire early, taking one year's salary and lifetime family medical benefits with him. Says Van Itallie: "I had an offer I couldn't refuse."

Plenty of others are reaching the same conclusion. Despite a weak economy and a shaky job market, Van Itallie is just one of 50,000 IBMers who over the past few months have agreed to quit their jobs in exchange for a tidy bag of cash and an uncertain future—twice the number IBM predicted would leave voluntarily. Now, Big Blue is giving the buyout strategy another shot: On July 27, as part of yet another massive restructuring, CEO Louis V. Gerstner Jr. announced that the company would offer somewhat less generous packages in hopes that another 35,000 workers will accept.

"I LIKED WORKING." Chances are, they will. Chances are, even more will take the bait. At Safeway Inc.'s Canadian operations, 3,000 workers recently took the money and walked—50% more than the company's expectations. Some 6,400 people at GTE Corp.'s Telephone Operations subsidiary opted out in May—fully 8% of the unit's work force. Similar examples abound at General Motors, DuPont, Sears, and other companies.

With new jobs scarce, why the mass exodus? Often, workers leave voluntarily because they risk getting old-fashioned pink slips or a far less generous deal a year later. That was the case for Van Itallie. Now, with his kids' college tuition bills looming, he's having a tough time landing new work. And given a true choice, he would rather have stayed with IBM. "I liked working," he says. "I worked until the last minute."

Others can't wait to bolt. These are the entrepreneurs, itching to make it on their own. When Texas Instruments Inc. offered an early retirement plan in 1991, Melvin Sharp was one of 2,900 to opt out. As one of TI's top lawyers, he had helped secure more than $1 billion worth of licensing fees since the mid-1980s. Taking his contacts and knowledge the industry with him, he started h own law firm with two TI co-workers a promptly took a seat on the board rival chipmaker Cyrix Corp. Says Sha "If you can just walk across the stre and get another job, then why not?"

For every happy retiree, thoug there's often a former employer w wishes that person was still on the pa roll. Companies are learning th buyouts can turn into expensive giv aways of gifted employees and expe enced veterans. Ohio-based utility Ce terior Energy Corp., for example, lo one-quarter of its highest-ranking ma agers to its current buyout progra And Eastman Kodak Co. had to scur to refill the jobs of 2,000 of the 8,3 workers who unexpectedly took its 19 buyout offer.

HAPPY RETURNS. That's not unusual. survey of personnel directors by Rig Associates, a Philadelphia consultin and outplacement firm, found that tw thirds of companies offering early retir ment in recent years unintentionally lo particularly valued employees. "Yo open up a [door] and suddenly ever body walks out," says John R. Bou beau, a Right Associates partner.

That can be costly. At General Moto Corp. and IBM, several executives too their buyouts, then accepted an offer t return to their employers. Others can back as highly paid consultants. IBM underestimate of the number of emplo ees taking buyouts cost it $2 billion additional severance expenses, charge against second-quarter earnings.

In some cases, buyouts can bring t the surface festering morale problem or create new ones. The early separa tions can irk those who stay behind, wh are often saddled with heavier wor loads and a sense of foreboding abou layoffs yet to come. At the *Los Angele Times*, another issue emerged: The pa

RON COLVIN IS HAPPY TO BE OUT OF BP AMERICA AND THE CORPORATE RAT RACE

offer of up to two years' pay and ne benefits pitted reporter against ter last year when they started dis- ıg salaries with one another for the time. Veteran reporter Bella bo quit in a rage—taking along a 000 package—when she learned male reporters were taking home ies that rangedfrom $20,000 to 0 a year more than hers.

There are happier endings. After 13 years with BP America Inc., 44-year-old Ron Colvin left his job as a marine fuels buyer and started his own business as a chimney sweep. Colvin says he's happy to be out of the corporate rat race and is making decent money. The only problem: "It gets lonely, working by yourself," he says.

But it's more than loneliness that's eating away at Van Itallie, late of IBM. Indeed, a bitter frustration that a lifetime's work is suddenly no longer needed may be the unifying symptom of the next 35,000 workers to leave IBM—and indeed, of this entire buyout generation.

By Eric Schine in Los Angeles, with Lynn Haessly in Cleveland, Evan I. Schwartz in New York, Peter Burrows in Dallas, and bureau reports

ING

IUMBLER NEIGHBORHOOD R THE GAP

stalled retailer ventures into the land of discounters

Whether The Gap Inc. is shifting downscale into polyesterland or whether it is adroitly ng to economic trends is one of glass-half-empty, glass-half-full ons. But there's little doubt the ɔt of a Gap Warehouse discount would have been nearly unthink- ı the rosy flush of the late 1980s, The Gap was the lord of specialty ıg and discounting was something Valton did.

thinkable now. Sales and profits at ap are long stalled. Ditto on the price, sagging near a one-year bot- t about 29, while the Dow dances ıll-time highs. So President Millard ckey" Drexler and his merchandis- ıvens figure it's again time to try ıing new.

latest experiment: Convert some Gap's poorest performing stores iscount centers called Gap Ware- The process of switching over 48 nationwide is under way. Gap ouse will sell new, separate lines hes that are similar to The Gap's —blue jeans, khaki pants, T-shirts, e like—but carry significantly low- eryday price tags. They'll go ıt up against traditional discount- ch as Kmart, Target Stores, Wal- Stores, and Mervyn's that have ome success copied the Gap style seriously undercutting it in price.

OTTON. "Good style, good quality, ralue" is the mantra Gap manag- one to describe what their custom- nt. Gap Warehouse will put extra t on the third virtue. "Times in terms of what people shop says Warren R. Hashagen, The senior vice-president for finance.

Warehouse clothes generally will ıde with lighter-weight fabrics, ss stitching detail than is common stores. Jeans will undergo lighter asting and stone-wash treatments, p prices down. The Gap has long been a cotton-lover's haven, but Gap Warehouse won't flinch from polyester (table). Its sweatshirts, for example, will contain 59% polyester, compared with 15% at The Gap. While most Gap stores cater to adults, Gap Warehouse will sell clothes for children as well.

A canvas Gap Warehouse banner has been draped on the wall outside the Gap store at the Vallco Fashion Plaza in Cupertino, Calif. Moms and mall rats comb through the new, lower-priced merchandise that carried such brands as Denim Supply Company, Kids Clothing Corporation, and Athletic Department. Although Gretchen Lamoreaux of Sunnyvale just bought a $22 pair of Gap Warehouse jeans for her 14-year-old daughter, Emily, she's reserving judgment. "I have five kids, and they share the clothes," she says. "If they don't last, I'll stop buying them."

Other shoppers like the styles and say the quality seems good. If The Gap can maintain its quality image, says apparel consultant Alan G. Millstein, it could lure a lot of bargain-oriented shoppers into the Warehouse who find The Gap too high-priced: "It's got to be sending shivers down their spines at Kmart."

The Gap is opening the Warehouses to boost sales and margins in its bottom-tier stores. If the concept catches on, Gap Warehouse could become a growth vehicle for a company that hasn't had a new hit store since GapKids debuted in 1986. But for now, there are no major expansion plans. "We're obviously testing something here," says Hashagen.

Because the conversions affect so few of the company's 1,350 stores, including Gap, GapKids, and Banana Republic, the Warehouse news has had little effect on Gap stock. Stock analysts want to wait and see. "It shows that this is a company that doesn't stand still," says Karen Sack at Standard & Poor's equity division. "My concern is how it's going to affect the regular Gap shopper." The Gap says the effect will be small. Thomas Tashjian, an analyst at First Manhattan Co., notes that the growth in apparel retailing today is at strip-shopping centers, outlet stores, and on TV.

To really excite Wall Street, The Gap needs to boost profits throughout its operations. It recently reshuffled its division heads, partly to freshen up their merchandising approach. Executives acknowledge Gap stores have lacked a sense of "newness" of late but have high hopes for its collection of fall women's wear, in the stores now. The Gap made its name by offering great-looking basics. Now, it's hoping to recapture some of its stature by pitching basics to customers who need basics most.

By Russell Mitchell in San Francisco

THE GAP BETWEEN THE GAPS

AT CURRENT GAP STORES:	AT GAP WAREHOUSES:
Regular jeans sell for $34	New line of jeans will go for $22
Sweatsuits contain 15% polyester	Sweats will be 59% polyester
Most socks are sold in pairs	They will be sold mainly in multiple units
All clothing has the Gap label	New Warehouse brands, except for some on-sale Gap items

DATA BUSINESS WEEK

LISA KNOUSE BRAIMAN/BW

Commentary/by Keith L. Alexander

IT'S TIME FOR USX TO TAKE LABOR'S OUTSTRETCHED HAND

United Steelworkers President Lynn R. Williams chose a bold course early this year when he set out to negotiate new labor pacts in the steel industry. Instead of the usual demands for better pay, he decided to stretch out a cooperative hand to management. By the end of July, three of the six major steelmakers—Inland, National, and Bethlehem—had agreed to meet him halfway. And LTV Corp. already had done so in bankruptcy court. The companies gave the union job guarantees and decision-making power, including seats on boards of directors. In exchange, the USW agreed to slash work rules, install teams on the factory floor, and alleviate disruptive strike threats, signing six-year pacts.

Now, it's USX Corp.'s turn. The company's U. S. Steel Group unit, whose union contract expires in January, already has said that it doesn't like Williams' terms. The reason may be a long history of antagonism toward labor and USX management's antipathy toward power-sharing. Similar motives may be keeping Armco Inc., whose pact ran out in July, from accepting the union's offer. But it would be a major error if either company let ideology blind it to the benefits of the USW's deal. Without the efficiency gains that should flow from the new work arrangements, both run the risk of being left behind.

Increasingly, USX "is going to be competing with nonunion minimills, which have few work rules, as well as with the other steel companies that have redesigned their work rules under these latest contracts," says Christopher Plummer, a steel analyst at Philadelphia-based Resource Strategies Inc.

SHARP CLIMB. Indeed, the four big USX rivals that signed on with Williams had little choice. The industry has lost money for three years. And while its productivity and quality have climbed sharply in the past decade, overseas rivals continue to raise the competitive hurdle. Foreigners retain 15% of the domestic market. And the competitive outlook intensified in late July, when the International Trade Commission overturned many of the tariffs on imported steel that Big Steel had sought. What's more, minimills are stealing market share almost by the hour.

Although it's not easy to make cooperative labor relations work, there's plenty of evidence that it can be done. Take National Steel Corp., which chose this path as long ago as 1986. The change wasn't free of friction. Despite no-layoff promises for union members with a year's seniority, some 20% of National's 9,500 workers still don't like cooperation, the USW says. But hourly workers act as foremen, gaining more input into decisions. And USW officers get data on everything from earnings targets to market conditions. Result: Productivity at National's main plant, in Ecorse, Mich., is among the industry's best, at 2.95 labor hours per ton.

Without the efficiency gains that should flow from new cooperative union agreements, USX and Armco run the risk of being left behind

The most dramatic payoff came in 1991, when the recession brought a $101 million loss in the first half and pushed National close to bankruptcy. When management asked workers for help, hundreds of ideas poured in. For example, workers surveyed the shop so rental equipment that wasn't being used could be returned. Costs fe $100 million, and productivity jum by 11% in one year. National bec the only major steelmaker to tu profit in the second half. Manager ran newspaper ads saying: "W partners with labor because we c imagine a future without them."

The new pacts go several steps ther. The union has agreed to help up work teams on the factory f which will require an extensive c haul of how work is organized. example, Inland electricians plumbers will help other out when nee which will reduce need to shut dow plant or work sta for maintenance as been traditional p tice. And as a part the process, joint m agement-labor com tees will oversee pr cally all aspects steelmaking.

TOUGH STANCE. companies hope all will bring dramatic cost reductions. For stance, Inland Steel executives say they be able to use attri to slash annual la costs by 20%, or $65 lion, by 1995. And company's productiv which now stands four labor hours ton, should fall to three, officials s "This contract will definitely make more competitive," says Inland Pr dent Maurice "Sandy" Nelson.

USX is leery of cooperation in p because its confrontational appro made it one of the most efficient of big U. S. steelmakers in the 198 However, much of those gains ca from slashing capacity and shutter old plants—a strategy that won't duce many more gains in the futu At this point, the company has choice: swallow its pride and take hand Williams has offered, or stick its management-knows-best attitu and hope that rivals don't pass it b

Alexander covers the steel indus from Pittsburgh.

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COMPUTERS

'PINK' MAY GET A PINK SLIP

Will Apple unload its lagging software venture with IBM?

Is Apple leaving Pink to Big Blue? Could be. The computer maker has begun shopping around some of its shares of Taligent Inc., one of its two software joint ventures with IBM, according to sources close to the company.

Both Apple Computer Inc. and IBM insist they remain committed to Taligent, founded in 1991, and the operating system software it is developing, codenamed Pink. But observers believe Taligent is struggling to get Pink out the door. Apple, they think, is losing interest. "Apple wants to sell at least half its stock in Taligent," contends Steven P. Jobs, Apple's cofounder and now chief executive of rival NeXT Computer Inc. Analysts and competitors confirm that Apple has offered to sell shares to Sun Microsystems Inc. and Hewlett-Packard Co., though neither has made any commitment. Neither will comment.

BORROWED BLOCKS. Pink was initiated at Apple in 1988, intended to produce a successor to the operating system for Macintosh computers. But Apple's current software strategy is unclear, given its financial troubles, and Pink may have lost its importance—especially as Apple's new CEO, Michael H. Spindler, reevaluates the company's commitments.

Moreover, outsiders say, the project appears unlikely to meet its planned 1996 delivery date. To speed things up, Taligent CEO Joseph M. Guglielmi is taking a major detour. Ins[illegible] of building an entire sys[illegible] from scratch, he is bor[illegible] ing existing technology f[illegible] IBM and others. The ques[illegible] is whether that deriva[illegible] tack will leave Taligent [illegible] any advantage over com[illegible] ing systems, including [illegible] Microsystems' Distribu[illegible] Objects Everywhere pro[illegible] and Microsoft Corp.'s C[illegible] which also are expecte[illegible] hit the market by 1995. N[illegible] Computer's NextStep already is [illegible] Most observers give Microsoft the e[illegible]

CEO GUGLIELMI: TAKING A SHORT CUT

The Taligent rumblings follo[illegible] shakeup at the other IBM-Apple vent[illegible] multimedia software developer Kal[illegible] Labs Inc. There, IBM veteran Michae[illegible] Braun has replaced A. Nathaniel G[illegible] haber. It's another indication, some [illegible] that IBM is increasing its influence. [illegible] simply that Apple is losing patience.

By Richard Brandt in San Fran[illegible]

COMPUTERS

THE PARALLEL UNIVERSE GROWS

Unisys, Intel, and IBM are moving into "alternative mainframes"

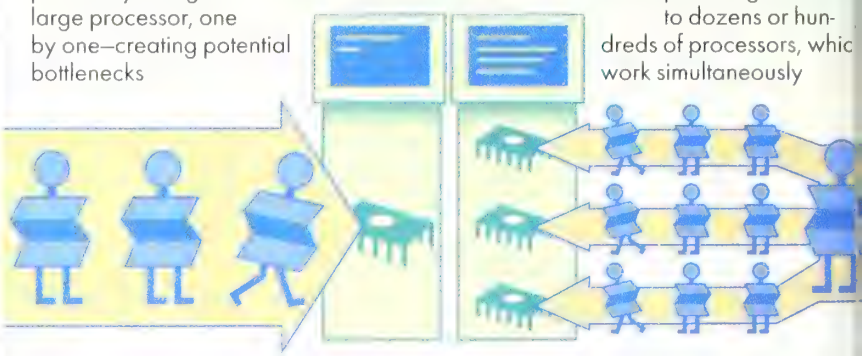
If two heads are better than one, why not a dozen? Or 50, or 100? That's the latest thinking in the commercial data processing market. For 40 years, mainframers such as IBM and Unisys have struggled to build the fastest single computer possible. But now they're bumping into fundamental physical limits, making each new speedup terribly expensive. So, the commercial mainframe industry, like supercomputer makers before it, is turning to parallel processing, ganging together scores of cheap microprocessors to attack big computing problems *en masse*.

On Aug. 3, Unisys Corp. and Intel Corp. jumped into the game. They're teaming up to build a commercial "mainframe" based on Intel's high-powered Pentium microprocessor. Neither prices nor details were announced, and shipments won't begin before 1995, officials said. But the deal makes this clear: The traditional mainframe's days are numbered. Parallel designs can do more work than traditional ones (chart) and for far less money. Unisys and Intel join AT&T's NCR unit, IBM, Sequent Computer Systems, Pyramid Technology, and some small supercomputer companies in the rush to exploit parallel computing. "It's quite clear that harnessing microprocessors together is the way to go," says Peter Kastner, vice-president of consultants Aberdeen Group Inc.

HOW PARALLEL PROCESSING WORKS

In conventional computing, tasks are accomplished by a single large processor, one by one—creating potential bottlenecks

Parallel processing speeds things up by parceling out tasks to dozens or hundreds of processors, which work simultaneously



Leading the pack has been AT&T/NCR, with more than 300 parallel systems installed among more than 150 customers worldwide. Most of those are add-ons to IBM mainframes that help crunch through massive data bases. But NCR also has begun shipping a general-purpose version, the 3600, that it markets as an alternative to standard mainframes.

BIG BLUE LINE. But the pressure on NCR is mounting: Mainframe leader IBM is preparing to go parallel, too. Formally, all Big Blue has introduced is a parallel computer designed mainly for scientific use, the SP1. IBM has focused on the scientific market because it wants to keep selling standard mainframe gear. But IBM says it will ship a parallel-processing add-on for its System/390 mainframes by 1994. And in June, it hired Ben C. Barnes, a former NCR large-s[illegible] tems executive, to exploit the SP1.

Intel, whose processors NCR us[illegible] across its entire product line, is enteri[illegible] the fray, too. A leader in scientific pa[illegible] lel computers, Intel is sharing with U[illegible] sys its expertise in creating effici[illegible] meshes, or high-speed networks, to c[illegible] nect hundreds of processors in a sin[illegible] machine. Unisys, No. 2 in mainfram[illegible] will contribute its understanding of co[illegible] mercial customers' needs. Still, Willi[illegible] J. Eisenman, vice-president of NC[illegible] Large Computer Products Div., is [illegible] worried. He reckons NCR can stay yea[illegible] ahead of Intel and Unisys—and IBM—[illegible] parallel-ready software.

Conventional wisdom has it that t[illegible] PC revolution is all but killng off t[illegible] mainframe. But if the mounting rage f[illegible] building alternative "mainframes" is a [illegible] indication, the high end of the comput[illegible] market has life in it yet.

By John Verity in New Yo[illegible]

THE NEW OL400e: NO LASER PRINTER MEASURES UP TO OUR FEATURES AND DOWN TO OUR SIZE.

(Diagram not actual size, but you get the idea, it's a small printer.)

12.6″

14.2″

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Okidata's solid-state printhead delivers laser perfect sharpness with LED reliability. Reliability backed with a five-ear printhead warranty, the lengthiest in the industry. Under the OL400e's compact 14.2″ x 12.6″ case is a built-in 100 sheet paper tray. ou can print transparencies, cards, labels, and envelopes, and collate them, too. The OL400e's microfine toner gives every printed haracter a smoother, cleaner edge. And you can choose your favorite smooth characters from 44 internal fonts– l this at an industry standard 4 pages per minute.

The Okidata OL400e is not only PC-compatible, it's wallet-compatible. So if you've put off uying a printer, and have a square foot or so to spare, telephone 1-800-OKI-TEAM, EXT. 282 for the ealer nearest you. And find out how much more you can get by spending less.

THE OL400e BY OKIDATA

MARKETING

WOULDN'T YOU LIKE TO KNOCK THE STUFFING OUT OF BARNEY?

Parents may hate his guts, but the toddler sensation is a money machine

I hate you, you hate me,
Two fractured branches on the family tree.
With a vicious barb and a thwack from me to you,
Won't you say you hate me too.
—I Hate Barney Secret Society theme song

If you're a breathing, sentient human being in America, you've heard of Barney. And if you share living quarters with a preschooler, you've *really* heard of him—night and day. He's the six-foot-four, purple-and-green tyrannosaur who appears daily in the Public Broadcasting Service television show *Barney & Friends*. He preaches loving, sharing, and caring, and tykes worship the ground he thumps on.

In just one year, Barneymania among the potty set has helped *Barney & Friends* pass 24-year-old *Sesame Street* to become the top-rated PBS children's series. Four-year-old Cheyane Rangel of Mesquite, Tex., for one, says she dotes on Barney because "he sings lots of songs and because he's a dinosaur."

TEDIOUS REX. Grownups, however, don't always look on the friendly critter with such affection. Through a combination of overexposure, mismanagement, and a few grating lyrics, PBS and Barney's other handlers put off folks like Robert Curran, an ad salesman in Fort Lauderdale, Fla., who founded the I Hate Barney Secret Society. Curran's newsletter aims to console parents of Barney groupies. His other concern: weaning his two-year-old daughter Michelle-Christine "from her drug of choice [Barney]... toward Walt Disney products like *The Little Mermaid* and *Fantasia*."

For a while, it looked like the Barney backlash among parents like Curran would leave toymakers with a surplus of purple plush and put one large, sappy dinosaur on the dole.

Well, adults are losing the battle: Barney is alive and, in the minds of many parents, all too well. Indeed, he's confirming an age-old lesson of marketing: However undiscriminating or annoying, children's choices greatly influence parents' purchases. "Parents can be as sick as they want to be of Barney. It won't make any difference. It's the kids who dictate what they buy," says Selina Guber, president of Children's Market Research in New York.

If you're a Barney hater, brace yourself. In May, Hasbro Inc. began rolling out a new line of 20 items, among them a talking doll that spouts 572 phrases. The first Barney music album is due Aug. 31, the initial fruit of a multiyear deal with EMI Records Group. On the horizon: a prime-time network special next April, a movie in 1995, and growth into international markets. Meanwhile, the TV show's Nielsen ratings still hover well above 3.0, compared with 2.6 for *Sesame Street* and rivaling many prime-time programs.

There's no sign that sales of Barney paraphernalia are slacking off. Consumers will snatch up more than $300 million worth of Barney toys this year, says analyst David S. Leibowitz of Republic New York Securities Corp. That's not even counting Barney sleepwear, linen, and lunch boxes. Plush-toy maker Dakin Inc. says it gets 10 Barney doll or for every one it can make. At Toys Us Inc., Barney remains "very m wanted by children," says Vice-Ch man Michael Goldstein. And Bar commands five slots on *Billboard*'s est Top 10 kids video sales chart.

PURPLE REIGN. What is it about Bar that gets parents' goats? Part of t complaint is with the TV show its There's little in the way of adult-min entertainment for parents who tun with their kids. And people, it seems, take only so much niceness from a s porting cast of bubbly, well-scrub kids, all singing, dancing, and huggi

Missteps by PBS have helped alien parents. There was last spring's pled drive fracas, when many PBS stati featured "Barney-thons" offering B ney merchandise during on-air fund-r ers. Some parents complained the m exploited children's love for Barney getting them to pressure their parents to contribute.

Then there's the merchandise. Tons it. The dinosaur's burst to stardom tr gered deals with 33 licensees, generati some 200 products. J. C. Penney Co. H opened Barney boutiques in its 1,3 stores nationwide. Things got so h that Lyons Group, the division of r gious and educational publisher RCL E terprises Inc. responsible for Barne economic welfare, imposed a moratori on licensing last December, to help e sure slower, more careful growth.

Moratorium or no, Barney isn't lik to go the way of the dinosaur soon. "W listen far more to what 3-year-olds thi than to what 30-year-olds think," sa Sheryl Leach, the ex-teacher who cre ed Barney in 1988 and now heads Lyo That's proved a potent marketing pla In other words: If you object to Barne flip back to *Masterpiece Theater*.

By Stephanie Anderson Forest in Dall with Paul Eng in New York and bure reports

BARNEY-MANIA

A (mercifully) small sampling of top-selling Barney paraphernalia

14-INCH PLUSH BARNEY DOLL (WITH OR WITHOUT MUSIC)	$19.99
BARNEY VIDEOTAPES	$14.95
9-INCH PLUSH BABY BOP	$9.99
TODDLER T-SHIRTS	$8.00
TODDLER SHORT SETS	$12.00
BARNEY NURSERY RHYME BOOKS	$7.95

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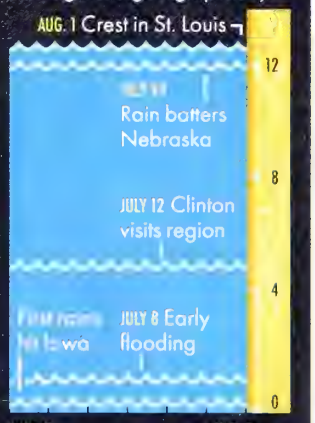
In Business This Week

EDITED BY KEITH H. HAMMONDS

THE RISING TIDE

It has been a month since the Midwest floods hit. Only a small portion of the property being destroyed is insured—just $655 million worth as of July 29. Even as the rains finally ease, estimates of the total damage are going up daily:



DATA: BUSINESS WEEK, AMERICAN INSURANCE SERVICES GROUP

MOTOROLA GETS CLOSER TO ORBIT

▶ Maybe Motorola really can pull this off. Battling widespread skepticism, the company on Aug. 2 announced it had lined up pledges for $800 million to finance its proposed worldwide satellite system. Sprint, the nation's third-largest telephone carrier, committed $40 million. Motorola also signed up BCE of Canada, a Japanese consortium of 18 companies such as Sony and Daini Denden, the Mawarid Group of Saudi Arabia, and China Great Wall Industry. The investors are expected to fork over an additional $800 million starting in 1995. Iridium, as the voice and data network is called, will cost $3.4 billion to build and launch by 1998.

PHILIP MORRIS SAYS, WAIT A MINUTE . . .

▶ Cheaper cheap smokes? Just five days before it was set to raise wholesale prices of its discount cigarettes by 8.2%, Philip Morris said on Aug. 4 that it would cut wholesale prices by some 4.1% on its Famous Value, Basic, Cambridge, Alpine, Bristol, and Bucks brands. Why? Mainly because rivals R. J. Reynolds, Lorillard, etc., weren't going to raise their discount prices. That meant Philip Morris would have been the only company hawking high-priced discount cigarettes. Its stock closed at 47 on Aug. 4, down ½.

MORE TURMOIL AT ZALE

▶ Days after its emergence from Chapter 11, Zale lost a chief executive. On Aug. 3, Dean Groussman abruptly left the nation's largest jewelry retailer, which he had led since his controversial bankruptcy court appointment last September. From the start, creditor groups had questioned the former Canadian Tire executive's lack of industry experience. Groussman's employment contract called for him to stay on through Zale's reorganization, at which time he and the new board were to have had 90 days to fix a new contract. Following disappointing spring sales, Zale recently cut back operating earnings projections for its current fiscal year.

NOW IT'S APPLE WHO'S WATCHING NEWTON

After years of *sturm, drang,* and upheaval, Apple Computer's Newton personal commmunicator has arrived. Chairman John Sculley unveiled the machine on Aug. 2 at a Boston Symphony Hall packed with such Apple groupies as actor Tom Selleck and author Tom Clancy.

CHECKING OUT A NEWTO

Can Newton live up to its hype? It does produce a nifty "poof" sound effect when you cross out a mistake. But the vaunted handwriting recognition software doesn't work well without customized "training." One demo unit asked a normally tidy BUSINESS WEEK reviewer scribble "Apple" three times before giving up. At the introd tion, Apple's own demonstrator had problems getting her N ton to set up the right lunch with the right person.

Customers testing Newton at New York's J&R Compu World also griped about the small screen. And the prod measures 7 inches by 4.5 inches—hardly the "shirt-pocket-si Apple promised. No cellular communications yet, either. A most customers found the $699 base price intimidating: midday following the introduction, a J&R manager said just Newtons had been sold—far fewer than expected. Not to w ry, said one enthusiast: "It's first generation. Give it time.

CALVIN HEATS UP THE AIRWAVES—AGAIN

▶ Never accuse Calvin Klein of understatment. Underdressing, that's another matter. Calvin Klein Cosmetics, the $300 million-plus division of Unilever, is causing a stir with another steamy campaign for its Obsession fragrance. The new muse for this $5 million advertis binge is Kate Moss, a you British model who unqu tionably bares all. In Obs sion for Men print ads t will appear in the Septem issues of *Vanity Fair* a *GQ*, among others, Moss

nude and prone on a cou Another ad features Mo bare-breasted, looking tir and bewildered. In one spot, tested in Florida July 29, Moss whispers: love you." In another, h boyfriend/photographer Mario Sorrenti purrs: "I lo you Kate." Let the protes begin.

HERE'S A DEFINING MOMENT IN TELEVISION...CBS AND NBC HAGGLING OVER WHO OWNS INTELLECTUAL RIGHTS TO LETTERMAN'S 'STUPID PET TRICKS'...

)UR COMPETITION DREAMS OF MAKING
\ CAR LIKE TAURUS.

;WEET DREAMS.

'ORD TAURUS

While others spend their time dreaming about making a car like Taurus, we've spent ours making America's best-selling car even better.* We've continued to improve everything from Taurus' suspension and handling to its ergonomically designed controls. We even added the security of available anti-lock brakes.

You can wait until the other guys make their dreams come true. Or you can get behind the wheel of a Ford Taurus today.

Standard driver's and optional right-front passenger air bag supplemental restraint system. Always wear your safety belts.

HAVE YOU DRIVEN A FORD LATELY?

Ford

on 1992 calendar year manufacturer's reported retail deliveries.

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EDITED BY STEPHEN H. WILDSTROM

VHY CLINTON COULD LET NAFTA IE OF NEGLECT

When Clintonites sing the praises of the North American Free Trade Agreement, the words are right, but the music lacks passion. And the shortage of viction at the White House could spell serious trouble for pact. As an embattled Bill Clinton seeks to sell the trade l to wary congressional Democrats, key political aides are stioning just how hard or quickly he should push.

'he immediate issue is timing. When Congress returns af- Labor Day, lawmakers will have at most three months left he session to deal with both NAFTA and lth-care reform. Some top Clinton politi- strategists believe health care is the nocrats' single best issue and argue that President must make an all-out push reform to revive support among core ty constituencies. If that means delaying trade pact, so be it. "The folks who ıt through the campaign with Clinton ık health care, not NAFTA, is the Presi- t's bellwether issue, now that the budget one," says one Administration insider.

T LABOR? Delay may equal death for TA. It would also allow the pact's foes, n Ross Perot to the AFL-CIO, extra ıths to organize, a prospect that gives traders the willies. "Clinton can't af- l to lose NAFTA," says C. Fred Bergsten he Institute of International Economics. 'hat argument leaves a lot of Democrats . Majority Whip David E. Bonior (D-Mich.), a NAFTA foe ı close ties to unions, got 100 colleagues to sign a July 27 er urging the White House to delay the submission of TA until Congress completes work on health care.

ıdministration sources say White House policy adviser rge R. Stephanopoulos and outside political strategist l E. Begala also argue that health care should take prece- ce. "Bonior was more than adequately representing Paul's vs on the subject," says one Hill Democrat. Begala, one of the architects of Clinton's campaign, denies any involvement in the Bonior initiative. "I believe the only way to a wealthier nation is through free trade," he declares. "We have to do both NAFTA and health care this fall." But, he adds, "I make no bones about my belief that reform of the health-care system . . . has to be the most important priority we have."

BONIOR: PUT HEALTH CARE FIRST

It will take more than two cheers for free trade to push the pact through Congress. Negotiators have just about wrapped up side accords designed to placate environmentalists and unions. But even if the pact provides generous benefits for displaced workers, many Clintonites think that labor is a lost cause.

GOP HELPERS. That makes it tough to find the necessary 218 House votes. The Administration can count on just 100 Democrats—and that could dwindle if voters berate members for the budget deal during the recess. "A lot depends on the reaction back home," says a senior Administration adviser. "We could be approaching a meltdown."

The need for heavy GOP support has led the White House to recruit a Republican as deputy to Chicago lawyer William Daley, who has been offered the post of top NAFTA salesman. Leading candidates are Nicholas Calio, a lobbyist in the Bush White House, and Josh Bolten, former minority trade counsel for the Senate Finance Committee.

The NAFTA sales team has its work cut out for it. Treasury Secretary Lloyd M. Bentsen and U. S. Trade Representative Mickey Kantor are going all out to muster support, but Clinton's commitment remains a question mark. In the list of Administration priorities that closed his Aug. 3 economic address to the nation, the President failed even to mention the pact. If the split within the Administration keeps Clinton from getting firmly behind NAFTA, the trade deal could wind up dead in the waters of the Rio Grande.

By Douglas Harbrecht

PITAL WRAPUP

ITITRUST

A quirk in the Federal Trade Commission rules is giving the govnment a second chance to hit Microft Corp. with an antitrust case. stice and the FTC split up cases, and one agency fails to act, that's normal- the end of the matter. But a 2-2 lit on the FTC left the commission able to either pursue or dismiss the mplaint. The decision to refer the se to Justice then fell to an obscure reaucrat in the FTC Bureau of Comtition, who is designated as the agen- 's liaison with Justice. The commisners could have voted to prevent e action—but the motion would have failed on the same 2-2 tie that has kept the case in legal limbo for months.

Before the office referred the civil case, Mary Lou Steptoe, who heads the Bureau of Competition, told commissioners she would send thousands of pages of documents to Justice within 24 hours unless told to do otherwise. Commissioner Deborah K. Owen, who opposed bringing a case against Microsoft, called for a vote to block the referral. But with FTC members seemingly weary of the issue, no one would even second the motion. The future of the case is now in the hands of Assistant Attorney General Anne Bingaman, who has so far given no indication of her intentions.

TIMBER

The forest-products industry fears there's little substance to a plan to end a legal logjam that has drastically curtailed the timber harvest in the Pacific Northwest. Administration officials struck a deal with environmental groups that would allow the cutting of 200 million board feet of lumber in the next few months—if the trees are taken in ways that don't hurt the endangered spotted owl. But the groups still have to approve the specific areas where logging will resume. "I don't think we're going to get as much as a toothpick," grumbles Mark Rey of the American Forest & Paper Assn.

RICHARD A. BLOOM/SABA

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No matter how similar they may appear, every child is unique. Each has different interests, different abilities and a different way of learning. With this kind of diversity in today's classrooms, it's essential that teachers have flexible, adaptable tools that allow children to learn at their own pace, in their own way. Apple® Macintosh® personal computers work in a simple, intuitive fashion, so any student of any age can learn to use one quickly and easily. Macintosh also runs a vast library of interactive software that takes advantage of its unique sound and graphics capabilities – giving teachers exciting new ways to stimulate curiosity, encourage exploration and meet the individual needs of each student. At Apple, we're working with educators to prepare students for the most important test of all: their future.

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FRANCE

CUTTING THE FRANC LOOSE

PRACTICALITY WON OUT OVER GALLIC PRIDE

It's a humbling moment for France. No sooner had Paris managed to shine up the franc this spring—as a cheeky new rival to the German mark—than skeptical money traders managed to explode French dreams. The late-July currency crisis that they set off, Europe's scariest in years, not only dethroned the franc but also nearly toppled the European monetary system. Yet in the Champagne region east of Paris, corks are popping. The Aug. 2 currency float that ended the crisis "is good for us in every way," says Jean-Jacques de Vriese, president of champagne giant Moët & Chandon. With Moët's sales down 12% this year, he hopes that a less fizzy franc will be a help in rescuing exports.

In assenting to a free-floating franc, Prime Minister Edouard Balladur could no longer ignore the woes of France's champagne makers—or for that matter, the problems of all French industry. True, Balladur had vowed to resign rather than cut the franc loose—and thus dash France's dream of financial and monetary equality with Germany. But ending France's withering recession and shoring up his party's popularity are more pressing goals than upholding France's notion of grandeur.

So, over the next few weeks, the government is likely to slash interest rates. And although the franc has budged little since the crisis, traders expect it will soon fall 5% to 7% against the mark.

In the end, Balladur had little choice. Sustaining Franco-German parity meant linking interest rates to the Bundesbank's high levels and stifling recovery in France. And the economy, although improved in many ways, is still full of weak spots.

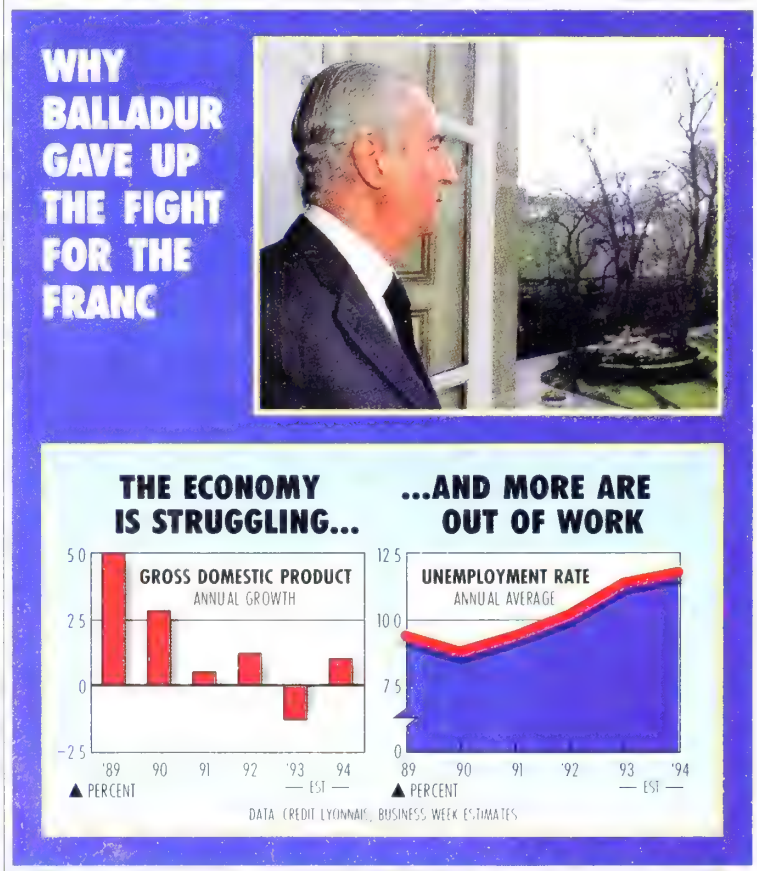
Many lagging state-owned companies are still facing the painful choice of whether to impose massive layoffs. They also badly need cheaper capital if they are to expand and modernize further. French banks are struggling under the weight of bad real estate loans. Even the best-managed companies have seen their exports shrink under the pressure of the strong franc. And small busin es are hurting, as local demand for t products dries up.

The French economy was a high in the late 1980s, but since then gro has been sluggish and unemploym has risen (charts). Part of the proble that many of France's best-managed porations have become more effic Such companies as drugmaker chemical giant Rhône-Poulenc, tirema Michelin, and steel company Usinor S lor have been closing plants, laying workers—and transforming themse into world-class competitors.

HOME TRUTHS. In today's tough ec my, though, the problem is that th rejuvenated companies often prefe invest abroad rather than in Fra And their numerous laid-off workers increasing the political heat on the ladur regime. World recession has badly hurt the demand for Fre goods, from Louis Vuitton handbag Renault cars.

Many French expor are in good shape to c roaring back, if the fr weakens and inter rates in Europe fall enough to spark a re ery. Astonishingly, Vo wagen Chairman Fe nand Piëch says that fears France's newly l auto makers—Rena and Peugeot—more t he does the Japanese. the country is in s need of a recovery in der to capitalize on the structuring of rec years—before thegove ment is pressured into tervening.

Balladur, France's c servative leader, had b steering a tight cou since becoming Pri Minister on Mar. 30 t year. Taking the lo view of French power, had sought a strong fr by squeezing budget d cits and offering o modest tax incentives juice the economy. succeeded for a while. reputation for sober m agement let him reduce short-term in est rates from 10% in April to 7% by l July—slightly below the German lev However, as the perception spre that nationalists in the Gaullist pa wanted more pump-priming and t France's recovery would trail Ger ny's, currency traders concluded t



TOP TO BOTTOM: LOOC BY ALBERT, MEDIA BW; PHOTOGRAPH BY JEAN-MICHEL TOPPIN/GAMMA LAPOS; CHART BY ARTHUR EVES

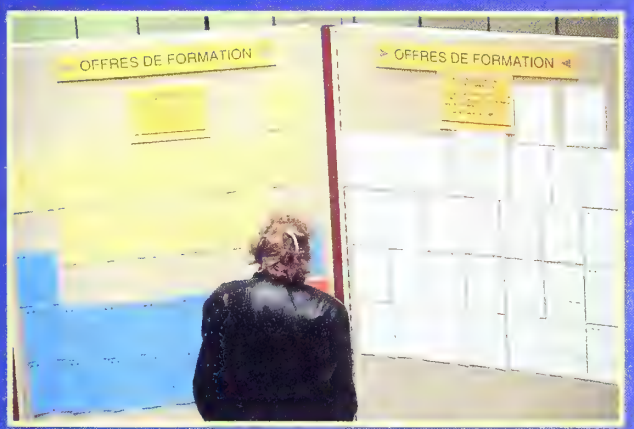
VEAK SPOTS IN THE FRENCH ECONOMY

asy money and a lower franc may ease the pain

EXPORTS
STRONG FRANC IS CRIMPING EXPORTS, EVEN IN EFFICIENT INDUSTRIES SUCH AS AUTOS, CHEMICALS, AND STEEL.

SMALL BUSINESS
HIGH INTEREST RATES SQUEEZE PRODUCERS AND RETAILERS. CHEAP IMPORTS HURT SMALL MANUFACTURERS.

ATE ITERPRISES
NY ARE STILL RT ON CAPITAL OVERSTAFFED. WER RATES COULD OST STOCKS AND P BALLADUR'S 0 BILLION VATIZATION VE.



BANKING
PROFITS HAVE BEEN SLASHED BY GROWING REAL ESTATE PROBLEMS AND BY CONSUMER LOAN DEFAULTS.

the franc was overvalued (page 45).

Balladur says he is still aiming for a strong franc and therefore doesn't want interest rates to fall fast. Nevertheless, William P. Sterling, international economist at Merrill Lynch & Co., predicts French short rates will fall to 4.5% or even lower in coming months. That could mean an economic upturn by early next year, he says.

"UNDERVALUED." Of course, low interest rates alone do not a strong recovery make—as has been shown in the U.S. Yet most French executives are already breathing easier. The prospect of lower rates should boost confidence and restart investment, predicts Geoff Unwin of French software company Cap Gemini Sogeti. "It's very good news," he says. For example, American chemical companies benefiting from the dollar's earlier weakness have been "very tough competition for us in the European market," says Jean-Pierre Tirouflet, finance director at Rhône-Poulenc. Now, he hopes to gain the export advantage in his rivalry with the Americans, if the franc weakens and financing costs fall on Rhône-Poulenc's high debt. A stronger French economy, Europe's second-largest, can only help the rest of the European Community recover.

France's troubled banks are another clear beneficiary. Crédit Lyonnais, Paribas, Indosuez, and others are weighed down by bad loans on Paris office buildings, whose values have plunged nearly 50% over the past four years. Lower interest rates mean lower carrying costs.

Easier money excites the Paris bourse—which jumped nearly 7% during Europe's monetary crisis. A stronger bourse means France can more easily privatize the 21 state-owned companies that it plans to put on the block, starting in September with Rhône-Poulenc, oil producer Elf Aquitaine, and Banque Nationale de Paris. Privatization should strengthen those state companies that suffer from high debt and bloated staffs.

As for the once-potent French franc, some observers in Paris think its day will return. "When France starts growing, people will see that the franc is undervalued," predicts Jean-Paul Betbèze, research director at France's biggest bank, Crédit Lyonnais. Yet he thinks high-cost Germany will be struggling to export. So by year-end, Betbèze predicts, "we can force Germany to adopt [growth-oriented policies]." Such swagger helped get France into trouble last month on currency markets. Paris should move more carefully next time in testing its monetary muscle.

By Stewart Toy with Jonathan B. Levine in Paris, John Templeman in Bonn, and Michael Mandel in New York

(TOP TO BOTTOM) PHOTOGRAPHS BY DIDIER MALLAC REA; SARA FINCHAL SIPA; PASCAL SITTLER REA; SABA

Commentary/by John Templeman

THE DEATH OF UNITY COULD ENLIVEN EUROPE'S ECONOMIES

Brussels' tan Borschette building probably won't be immortalized in economic history the way New York's Plaza Hotel was after the world's monetary brass sorted out the dollar's fate there in 1985. But perhaps it deserves to be.

It was at the Borschette, a European Community conference center, that the Continent's finance ministers and central bankers finally woke up to reality. In 12 hours of tense negotiations, they cut a deal that all but scuttled Europe's no longer tenable system of regulated exchange rates. France is now free to cut rates without worrying about keeping its currency in line with the overstrong German mark. Germany can concentrate on getting its economy, Europe's largest and, in some ways, sickest, back on track after the shock of unification. The move may well be the Continent's best shot at pulling out of a severe, two-year recession.

NO FREE RIDES. It may also finally quash the ill-conceived efforts to rush ahead with the Maastricht Treaty on political and economic union. Both Maastricht and the Exchange Rate Mechanism tried to enforce economic discipline. But the lesson of the currency crisis is that trying to manage the increasingly complex European economy by edict from Brussels or elsewhere is doomed to fail.

The new economic order that is emerging will rely on market discipline to keep the wayward in line. Politicians who let debt pile up or inflation surge are likely to have their currencies shellacked by global traders. They may be able to get a brief free ride from devalued money, but longer-term, the bill will be paid with higher interest rates and taxes and slower growth.

Europe's major economic achievement of the last decade—the single market—has made it a lot tougher for governments to cut corners. By demolishing exchange controls, Europe, perhaps unwittingly, opened the way for the foreign exchange market to punish out-of-line governments. "The liberalization of capital movements has subjected politicians to much greater market scrutiny," says Thomas Mayer, chief economist at Goldman, Sachs & Co. in Frankfurt.

Business would rather not have exchange-rate volatility; it makes planning and investment more difficult. But business is now well-versed in hedging, and the ERM was no longer workable. Created in 1979, it served its purpose in a simpler time. But the fall of the Berlin wall and the coming of recession put it under too much strain. Once German unification is further along and the Italian, French, and other economies near the end of restructuring, a more closely coordinated system might once again be appropriate. But that may not be necessary. After some short-term buffeting, the currencies could well become more stable—now that freeing them has greatly raised the risk for speculators.

Toppling such a sacred totem has created plenty of worry about Europe's future. No one knows how much damage has been done to the bedrock German-French relationship. But in reality, Europe couldn't continue the way it was heading. The ERM, designed to bring currency stability to the EC, producing the opposite. The latest rency crisis was the second blowu less than a year. Britain and dropped out of the system last fal

Worse yet, the currency struc was ratcheting up political tension the high rates imposed by the Bun bank strangled one European econ after another. Plummeting growth lengthening unemployment rolls flamed resentment of the Germans played into the hands of extremist ties such as German neo-Nazis France's National Front.

Despite the comments of some E pean leaders, the ERM is virtuall dead letter. Currencies can swing a massive 30% aga each other. That's more than free-floating dollar has varie its roller coaster ride against mark in the three years s German unification.

A SPARK? While France is obvious beneficiary of the lo system, Germany is not pleased. The Bundesbank not have to throw billions a supporting other currencies. stronger European growth c fuel demand for German ports—giving the economy spark it badly needs.

It will take some time for rope's politicians to adjust to new order. They have investe much political capital in the and the Maastricht Treaty th will be hard for them to let French Finance Minister Edm Alphandéry is vowing to k the franc as close to its old fi rate as possible. But it would absurd to keep rates at the recession-perpetuating levels.

One hopes European politicians absorb the proper lessons from the year of turmoil. First, forcing an ex sive degree of unity on Europe lead to trouble. Second, despite re sion, the single market is working w Borders are open, costs are droppi business is becoming more competit Europe needs to let market forces as checks and balances—not try to islate outcomes from Brussels.

Templeman is BUSINESS WEEK's B bureau chief.

ANKFURT STOCK EXCHANGE: GERMAN FINANCIAL ISSUES MAY BE AMONG THE FIRST WINNERS

IKE PARIS IN THE SUMMER, TOCKS ARE SIZZLING

opes for cheaper money are firing up Europe's bourses

DM

Don't try to tell stock traders that the implosion of Europe's exchange rate system was an embarrassing setback for the region's eams of political and economic unity. ı bourses across the Continent, it's be- g greeted as the best news in years. Freed from the Bundesbank's tight re- raints, traders argue, the rest of Eu- pe now will be able to devalue curren- es to boost exports and slash interest tes to foster growth. "This will mean a gnificant easing," says Michael How- l, global strategist at London's Baring ecurities Ltd. And that could signal gher profits and stock prices almost ross the board.

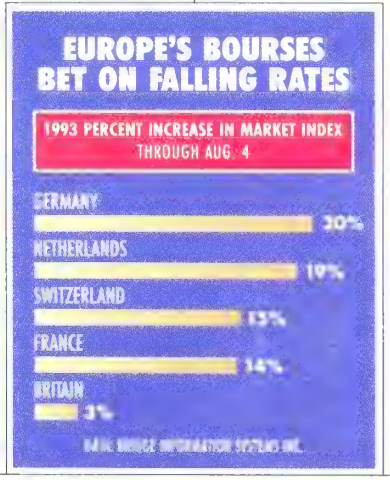
O FOR GROWTH. Traders were betting ı lower rates long before finance minis- rs and central bankers all but suspend- the rules of the European Monetary ystem's exchange rate mechanism RM) on Aug. 1. Bourses had been rising r weeks (chart) as speculation in- eased that France would break loose. deed, just one day after the finance inisters allowed the franc and most her European Community currencies fluctuate as much as 15% against the ark, Spain reduced interest rates a alf-percentage point, to 10.5%. "The im- etus is no longer coming from the Bundesbank, but from France, Spain, and other ERM members," says Howell. "They will be cutting rates aggressively." If that happens, the Bundesbank is likely to follow. Many pros figure German rates will fall as much as 2 percentage points by mid-1994, to 4.5%.

Last year, Britain, Italy, and Sweden saw stocks advance sharply after they severed their ties to the German mark amid a previous ERM upheaval. Now, many pros are recommending Dutch, French, German, and Spanish banking and insurance issues as the first to gain from lower interest rates. Wolfhard Graetz, chief investment officer at Bank Vontobel in Zurich, likes Union Bank of Switzerland, Frankfurt's Commerzbank and Deutsche Bank, and France's Compagnie Financière de Suez. But Joe Rooney, Lehman Brothers' London-based stock picker, favors Holland's ABN-AMRO, Switzerland's CS Holding, and Spain's Banco Santander.

Graetz also is betting that the end result of lower rates—swifter economic growth—will fire up industrial issues as well. He favors the German engineering group Mannesmann and French cement maker Lafarge Coppée. But others recommend STET, the Italian telecommunications group, which is selling at only 1.5 times cash flow. Rooney, meanwhile, recommends German auto makers Volkswagen and BMW, as well as Valeo, the French auto parts manufacturer.

In fact, many analysts continue to back French equities as Europe's hottest buys. Prime Minister Edouard Balladur needs lower interest rates if his massive privatization program is to succeed. Among the jewels up for sale will be part of the government's majority stake in the national oil company Elf Aquitaine, which many analysts already consider to be one of Europe's top picks. But Elf is hardly France's only bargain. Baring Securities strategist Howell, for one, recommends the France Growth Fund, even though it's trading at a record-high 12⅜ on the New York Stock Exchange. And David Donnelly, portfolio manager of the Skyline Europe Fund, Has been building his holdings of chemical maker Rhône-Poulenc and Bouygues, the multinational construction group. The devalued franc will help bolster Bouygues' foreign sales, and the company also stands to gain from an improving French economy. "It's a classical cyclical recovery play," he says.

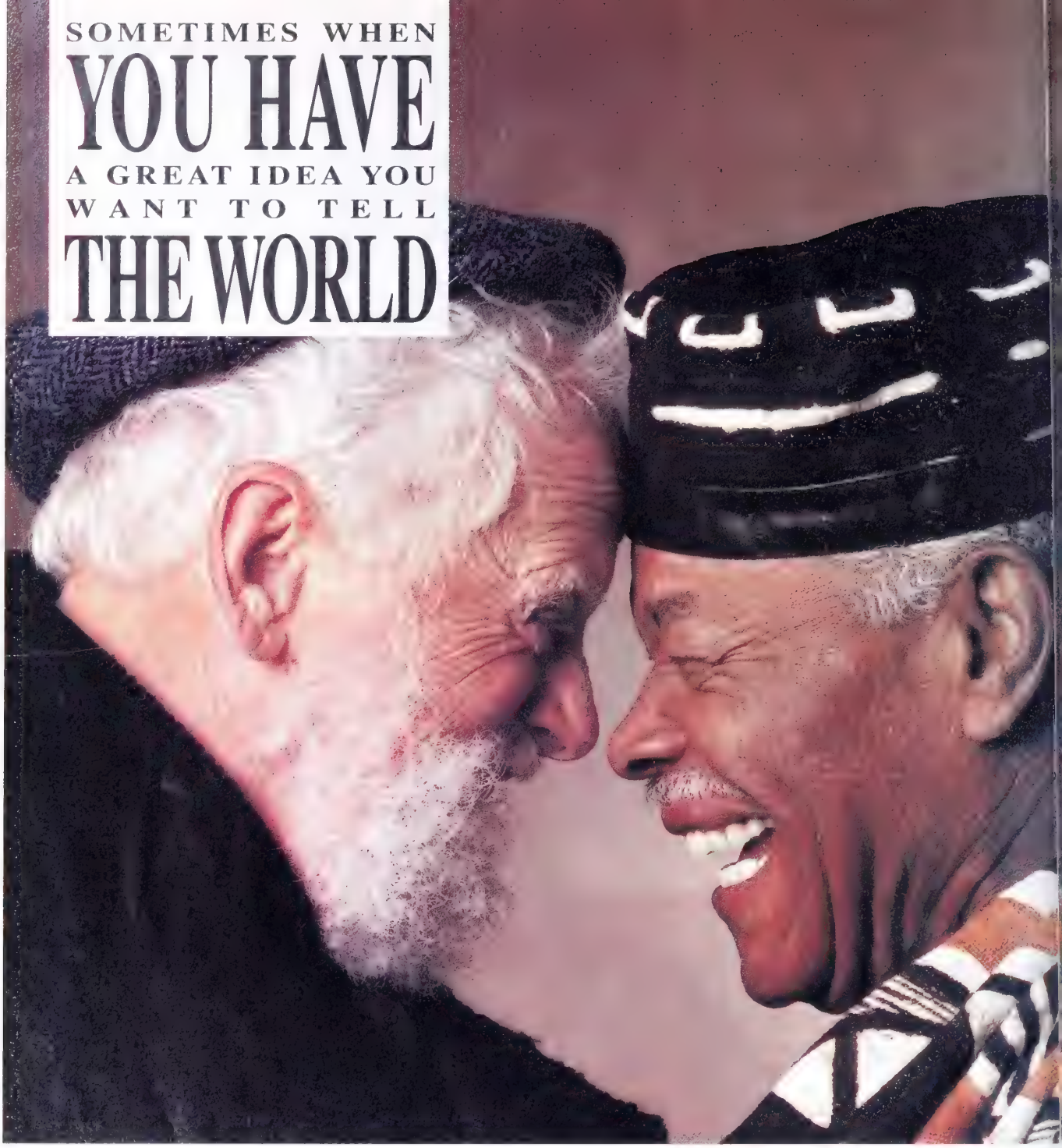
SOARING YEN. Efforts to get Europe's economy moving also have helped bolster stocks in the U. S. (page 90), whose exporters depend heavily on European sales. Even Tokyo may be caught up in Europe's warming winds. Investors fleeing devalued European currencies have sent the Japanese yen soaring along with the mark. If that prompts the Bank of Japan to reduce its discount rate, traders might try to push the Nikkei stock average past 20,000, where it has been stuck for months.



Cheaper money is always a powerful tonic for stocks. But this time around, Europe's monetary cure may be even more effective than anyone suspected. Not only will it help get Europe out of recession—it also may fuel a stock market rally around the globe.

By William Glasgall in New York, with Bill Javetski in Paris

PHOTOGRAPH BY JOACHIM HERRMANN/REUTER



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EDITED BY STANLEY REED

APAN'S REVOLUTION OULD END UP AS PARALYSIS

Vith the formation of Japan's first non-Liberal Democratic Party government in 38 years, talk of political revolution is reverberating in Tokyo. New me Minister Morihiro Hosokawa is billed as a populist in ning armor riding to the rescue of Japan's long-oppressed ctorate. He and his eight-party coalition are supposedly sed to enact electoral reform, overhaul the tax system, rein bureaucrats, deregulate the economy, and make the consu- r king. All of which means it's time for a reality check.

There's no denying that the LDP's sudden, shocking loss of ver has altered Japan's political landscape, perhaps forever. e aging generation of postwar leaders is finally being edged . And there's no doubting that the ascendant younger pol- ians have different ideas from their forerunners.

AGILE ALLIANCE. But anyone who expects sweeping overnight nges in Japanese policies or behavior will be disappointed. sokawa's disparate lition, pulling to- her socialist, Bud- st, and conserva- e parties, is so gile that any seri- policy dispute ld break it up. at's more, Ichiro awa, the renegade o engineered the 's downfall, is the gmaker of the co- ion. Behind the nes, he is arguing caution while he es his political and d-raising skills to ld a new party capable of forming a government on its n.

OZAWA, LEFT, IS CALLING MOST OF THE SHOTS IN THE NEW COALITION GOVERNMENT OF PRIME MINISTER HOSOKAWA

Hosokawa and Ozawa may be able to push through some ctoral redistricting—the only thing the whole coalition rees on. But the partners are likely to squabble over virtu- y everything else—from military spending to tax policy. ralysis could well be the result. "These guys are about to rn that running a government is a lot harder than winning election," says a veteran LDP aide.

The potential paralysis forebodes darker days for U. S.- panese economic relations. The ballyhooed new "frame- rk" for trade talks hammered out by President Bill Clinton his recent trip to Tokyo could soon start unraveling. "I fear talks could be doomed," says one Administration official. lds another: "We know the Japanese are going to try to me the change in government for more delay."

As usual, a big frustration will be figuring out who's really charge and how to deal with them. For some years, true po- ical power in Japan has been wielded not by Prime Minis- s such as Toshiki Kaifu or Kiichi Miyazawa but by shadowy ck-room puppeteers. These included Shin Kanemaru, the w disgraced don of LDP politics whose trial for tax evasion cently started. When former U. S. Ambassador Michael H. macost had to twist Japanese arms for gulf war assis- nce, he went not to Kaifu but to Kanemaru.

Hosokawa's new government appears to be cut from the same cloth, with Ozawa as the real power broker. Indeed, Ozawa, a former LDP secretary-general, previously served as understudy to none other than Kanemaru. It was 51-year-old Ozawa who masterminded the split from the LDP in June of 35 Diet members that doomed Miyazawa's government. Hosokawa, 55, wouldn't be Prime Minister but for the blessing of Ozawa, whose party outguns Hosokawa's Japan New Party. Recently, the smooth, affable Ozawa brushed off suggestions that he was the key player in the new coalition. "That's never occurred to me," he insisted. "The mission of politics isn't about such petty questions but whether we can accomplish the will of the people." But a Diet member from Hosokawa's party acknowledges privately that Ozawa is calling most of the shots.

Hosokawa and Ozawa offer a striking contrast in styles. Hosokawa is the scion of one of Japan's most prominent samurai families. The self-effacing former governor of southern Kumamoto Prefecture talks publicly in the reserved, enigmatic style of traditional Japanese politicians. Many observers think Hosokawa is a little naive. He is an idealist who wants to clean up politics because he thinks it is the right thing to do. He has no significant experience at the national level and is likely to be severely tested by a major domestic or international political flare-up.

OUTSPOKEN. By contrast, Ozawa is the consummate political professional. A second-generation member of the Diet in his ninth term, he speaks with the boldness of a political heavyweight. He wants to build a modern, accountable system because he believes that's what Japan needs to become a world-class power. Everyone believes he would like to head up such a government once it is in place. Washington may find Ozawa's candor refreshing after his mealy-mouthed predecessors. He wants to see a Japan that is more forthright about assuming international obligations—something the U. S. wants. But he is less likely to put up with what he regards as American bullying.

While something of an odd couple, Ozawa and Hosokawa are temporarily united on a mission. Both want to reform Japan's corruption-inducing, disproportionate electoral system. They hate Japan's overwhelming bureaucracy and over-regulation. And they want politicians to engage in a real policy debate that leads to an activist international agenda for Japan. But their very different goals and mind-sets are bound to clash. Their current collaboration and likely split will shape the drama of Japanese politics over the next year.

By Robert Neff in Tokyo, with Douglas Harbrecht in Washington

HAS Photos: YAMAGUCHI, SYGMA (2)

AN O.K. QUARTER—WITH

EXCLUDING IBM'S MEGALOSS, PROFITS WOULD HAVE JUMPED 36% THAN

Big Blue's protracted woes cast a long shadow over second-quarter corporate profits. The staggering $8 billion loss at IBM—following huge restructuring charges—dramatically toned down otherwise buoyant earnings news for Corporate America. Profits rose 13% on average for the 900 companies in BUSINESS WEEK's Scoreboard. If Big Blue's results were excluded, profits would have jumped 36%, compared with 27% in the first quarter's increase and a 20% profit rise recorded a year ago.

Cost-cutting and a slight uptick in the economy were largely responsible for the earnings increase. The U. S. economy grew at a sluggish 1.6% annual rate in the second quarter. But that was a lot better than the first quarter's 0.7%. True, overall revenues continued to grow modestly. Sales rose 5%, to $985 billion, in the second quarter, according to Standard & Poor's Corp.'s Compustat Services. But profit margins improved. Excluding IBM, net margins grew to 5.3%, the best margin recorded since the second quarter of 1989, when it stood at 5.8%.

Still, many economists were disappointed by the profit picture. "This is something of a half-speed recovery and can never match the strength of traditional booms," says economist Roger E. Brinner of DRI/McGraw-Hill.

Economists' biggest worry is that earnings growth could slow if sales don't improve significantly and the immediate benefits of restructuring, notably from payroll cuts, gradually disappear. In the absence of any significant rebound in the economy, Maureen Allyn, chief economist at Scudder, Stevens & Clark Inc., says corporate earnings might increase only 12.5% during the last half of 1993. And she warns that profit growth could average 9% for all of 1994.

SEARS ROBUST. Auto companies showed the sharpest profit improvement in the latest quarter. The combined earnings for the Big Three came to $2.3 billion, a far cry from the $138 million loss they suffered a year ago. True, the impressive results had a lot to do with the recent restructuring in previous quarters. But the bottom line also got a boost from strong vehicle sales—one of the few positive economic signs that emerged in the second quarter. Indeed, as a group, revenues rose 9%, to $79 billion. By far the biggest winner was General Motors Corp. The nation's biggest carmaker earned $889.1 million vs. a $703.2 million loss in last year's second quarter.

Bank earnings again surged ahead. Continued low interest rates and a drop in charges for bad loans helped. So did huge returns from trading securities a

WINNERS AND LOSERS

THE INDUSTRIES

THE SHARPEST GAINS	Percentage change from 1992's second quarter	THE DEEPEST DROPS	Percentage change from 1992's second quarter
RAILROADS	310%	COMPUTERS & PERIPHERALS	[illegible]
GAS UTILITIES	154	STEEL	[illegible]
FOREST PRODUCTS	130	SAVINGS & LOAN	[illegible]
SEMICONDUCTORS	118	ALUMINUM	[illegible]
SPECIAL MACHINERY	100	INSTRUMENTS	[illegible]
FOOD RETAILING	93	PAPER CONTAINERS	[illegible]
RETAILING	81	POLLUTION CONTROL	[illegible]
BANKS-WEST & SOUTHWEST	78	TOBACCO	[illegible]
INSURANCE	74	COAL	[illegible]
CONSTRUCTION & REAL ESTATE	71	DRUGS & RESEARCH	[illegible]
OIL & GAS	70	FOOD PROCESSING	[illegible]
AUTO PARTS	65	MISC. LEISURE	[illegible]
BANKS-EAST	60	CHEMICALS	[illegible]
TRANSPORTATION SERVICES	55	PAPER	[illegible]
COMPUTER SOFTWARE & SERVICES	44	TRUCKING & SHIPPING	[illegible]

ALL-INDUSTRY AVERAGE: +13

NE BIG BLUE EXCEPTION

OST-CUTTING AND AN UPTICK IN THE ECONOMY

gn currency. Citicorp saw its trading nues rise by 82%, to $572 million. result of the friendlier banking en- nment, Citi's earnings rose 212%, to million. Likewise, earnings at Bank- erica Corp. more than doubled in the st quarter, to $488 million.

etailers also boasted healthier bot- lines. As a group, profits for retail- rose 81%, to $2.3 billion, thanks to a increase in sales and reductions in head. Sears, Roebuck & Co. provided one of the biggest surprises of the quarter with better-than-expected earnings of $1.09 billion, up 433% from a year earlier. Indeed, Sears ended up as the quarter's most profitable company behind Exxon Corp. Even though sales at Sears were off 4%, to $12 billion, analysts credit the company's cost cutting, including the closing of its catalog business, for improving margins.

Airlines also seemed to challenge conventional wisdom, with the industry posting its first profit since the third quarter of 1991. The winding down of incessant fare wars provided a big boost. Among the better performers was AMR Corp. The parent of American Airlines earned $47 million in the second quarter, compared with a loss of $183 million a year earlier. Meanwhile, railroad earnings bounded higher, thanks to increased freight traffic and recent cost-cutting. As a group, it posted the strongest profit growth of any industry—up 310%, to $872 million. Still, many analysts are concerned that the Midwest floods, which are wreaking havoc with routes and schedules, could curb railroad profit growth in the second half.

COMPUTER CRUNCH. The second quarter also produced its share of disappointments. Computers yielded a notable crop of losers. The group posted losses of $7.9 billion, largely because of IBM's staggering $8.9 billion pretax charge. But other leading computer manufacturers also had a bad time of it, as competition intensified and personal-computer price wars raged on. Apple Computer Inc. reported a loss of $188 million after taking almost $321 million in restructuring charges. Tandem Computers Inc., which makes computer networks, had a loss of $550 million after taking a $451 million charge for impending layoffs and plant closings.

Still, there were bright spots: Digital Equipment Corp. had its first profit in six quarters, thanks to drastic cost-cutting in the past 12 months. It earned $113.2 million vs. a loss of $1.9 billion a year earlier.

While the misfortunes of IBM and Apple have been widely publicized, chemical companies appeared to suffer in silence. With sales stagnant or falling be-

ID-QUARTER PROFITS

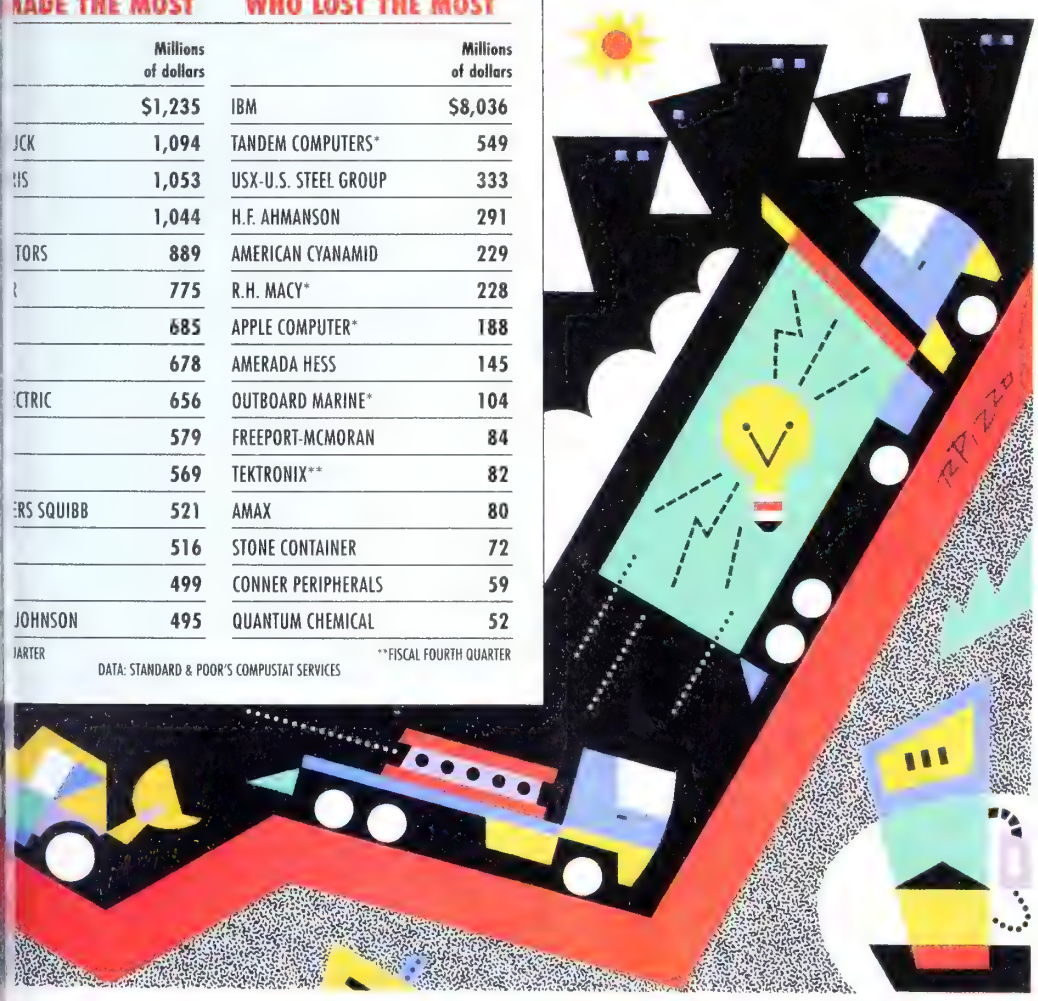
THE COMPANIES

ADE THE MOST	Millions of dollars	WHO LOST THE MOST	Millions of dollars
	$1,235	IBM	$8,036
JCK	1,094	TANDEM COMPUTERS*	549
IS	1,053	USX-U.S. STEEL GROUP	333
	1,044	H.F. AHMANSON	291
TORS	889	AMERICAN CYANAMID	229
	775	R.H. MACY*	228
	685	APPLE COMPUTER*	188
	678	AMERADA HESS	145
CTRIC	656	OUTBOARD MARINE*	104
	579	FREEPORT-MCMORAN	84
	569	TEKTRONIX**	82
RS SQUIBB	521	AMAX	80
	516	STONE CONTAINER	72
	499	CONNER PERIPHERALS	59
JOHNSON	495	QUANTUM CHEMICAL	52

ARTER

**FISCAL FOURTH QUARTER

DATA: STANDARD & POOR'S COMPUSTAT SERVICES



cause of the slow economy, industry profits fell 11%. Dow Chemical Co. was one of the worst hit, with profits down 23%, to $149 million. The results reflect a 1% dip in sales, to $4.8 billion, and a $180 million pretax charge taken by its subsidiary, Marion Merrell Dow Inc., to reduce its sales staff by 13%, or 1,300.

Going forward, many economists are betting that economic activity will pick up. Inventory levels are low, and that could spur production in the second half. But few see a sharp rebound. Consumers remain wary of tax increases and ongoing payroll cuts. Economists expect consumer spending in the second half to grow 3.5%, about the same pace as in the second quarter.

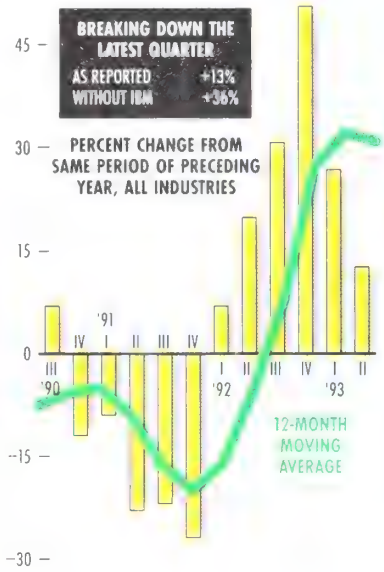
Another damper: continued economic weakness in Japan and Europe that could further hurt U. S. exports. Scudder Stevens' Allyn sees economic growth averaging between 2.5% and 3% in the second half. And most economists doubt that the pace will pick up in 1994. In deed, Allyn warns that the growth r might slow to 2%.

That doesn't bode well for prof With the benefits of restructuring w ing in the absence of stronger sal Corporate America may have done much as it could to help its bottom l for the time being. Now, it's up to economy.

By Sunita Wadekar Bhargava in N York

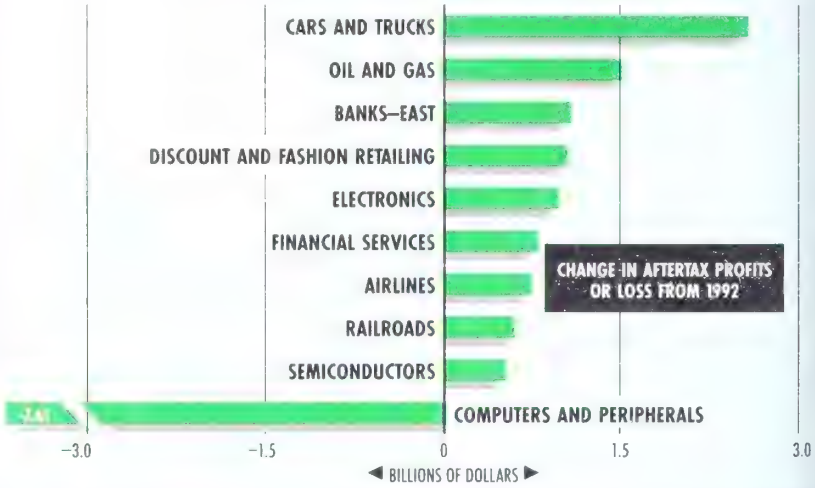
A SPOTLIGHT ON SECOND-QUARTER PROFITS

AFTERTAX PROFITS, QUARTER BY QUARTER



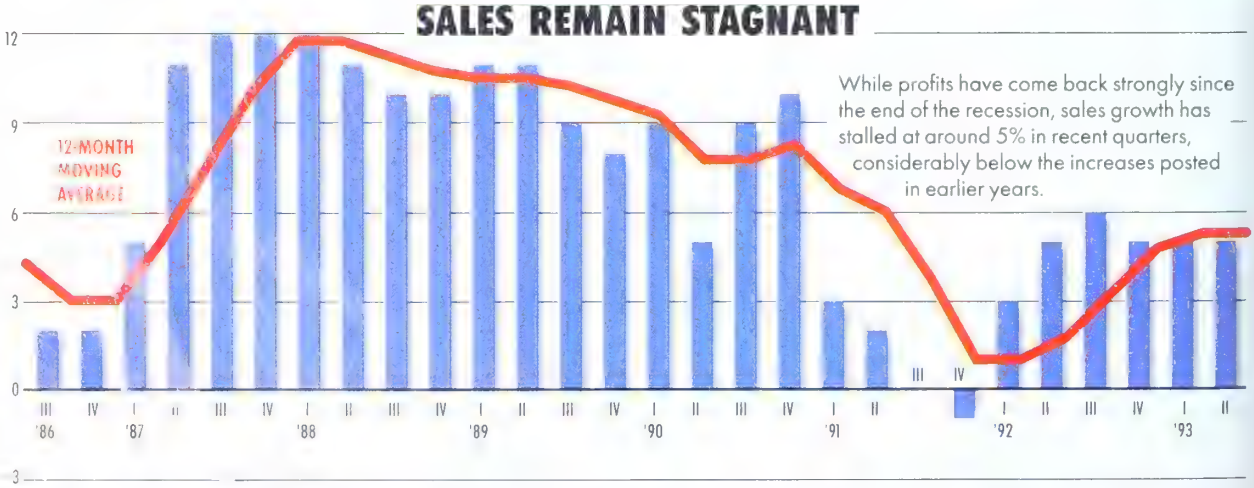
INDUSTRIES WITH THE BIGGEST DOLLAR CHANGE IN THE QUARTER

Don't become too preoccupied with IBM's $8 billion loss: There were other, more pleasant surprises this quarter. Airlines made money for the first time since the third quarter of 1991, while retailers and carmakers continued to chalk up improved earnings. Oil company profits also climbed sharply.



SALES REMAIN STAGNANT

While profits have come back strongly since the end of the recession, sales growth has stalled at around 5% in recent quarters, considerably below the increases posted in earlier years.



▲ PERCENT CHANGE FROM THE SAME PERIOD OF THE PRECEDING YEAR

DATA: STANDARD & POOR'S COMPUSTAT

CORPORATE SCOREBOARD

SECOND QUARTER 1993

OSSARY

s: Includes all sales and other operating nues. For banks, includes all operating nues.

fits: Net income before extraordinary s. For banks, profits are net income after rity gains or losses.

Margins: Net income from continuing operations before extraordinary items as percent of sales

Return on common equity: Ratio of net income available for common stockholders (most recent 12 months) to latest available common equity, which includes common stock, capital surplus, and retained earnings.

Price-earnings ratio: Based on July 23, 1993, common stock price and corporate earnings from continuing operations before extraordinary items for most recent 12-month period.

Earnings per share: For most recent 12-month period. Includes all common stock equivalents.

OMPANY	SALES				PROFITS								
									MARGINS				
	2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	6 MONTHS 1993 $ MIL.	CHANGE FROM 1992 %	2ND QUARTER 1993 $ MIL.	CHANGE FROM 1992 %	6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	2ND QUARTER 1993 %	2ND QUARTER 1992 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-23	12 MONTHS' EARNINGS PER SHARE
L-INDUSTRY MPOSITE	**985116.0**	**5**	**1947698.0**	**5**	**43018.2**	**13**	**91772.3**	**20**	**4.4**	**4.1**	**11.4**	**22**	**1.71**
EROSPACE & DEFENSE													
USTRY COMPOSITE	**27488.3**	**2**	**50562.6**	**-3**	**1105.1**	**28**	**1995.3**	**19**	**4.0**	**3.2**	**15.8**	**10**	**4.65**
eing	7985.0	2	14629.0	-7	426.0	-1	751.0	-12	5.3	5.5	17.3	9	4.28
nCorp (1)	492.3	-1	893.8	-7	17.8	31	23.9	51	3.6	2.7	13.3	18	0.95
neral Dynamics	793.0	-7	1671.0	-2	57.0	58	98.0	48	7.2	4.2	14.4	11	8.18
umman	746.2**	-13	1618.0	-10	26.8	13	61.1	15	3.6	2.8	15.5	11	3.75
ckheed	3349.0	35	5857.0	24	94.0	22	170.0	19	2.8	3.1	17.7	11	6.07
artin Marietta	2613.3	65	3781.9	28	124.1	25	200.5	16	4.7	6.2	22.2	11	7.55
Donnell Douglas	3814.0	-21	7437.0	-16	170.0	NM	349.0	NM	4.5	0.1	29.0	3	26.86
orthrop	1312.0	-9	2587.0	-6	53.0	4	105.0	7	4.0	3.5	9.9	14	2.69
hr (5)	296.8	-1	638.9	5	-22.2	NM	-19.4	NM	NM	NM	-11.8	NM	-1.20
ndstrand	341.8	-6	682.5	-3	19.3	NM	44.5	189	5.6	NM	20.6	13	3.06
eflex	174.9**	18	332.5	18	9.3	8	17.8	8	5.3	5.8	13.5	16	1.94
ited Technologies	5570.0**	-3	10434.0	-4	130.0	-12	194.0	-20	2.3	2.6	-1.6	NM	-0.45
UTOMOTIVE													
USTRY COMPOSITE	**88431.0**	**8**	**171529.0**	**10**	**2839.6**	**1848**	**4787.9**	**3790**	**3.2**	**0.2**	**6.2**	**54**	**0.84**
RS & TRUCKS													
OUP COMPOSITE	**78820.0**	**9**	**152946.6**	**10**	**2389.9**	**NM**	**4027.5**	**NM**	**3.0**	**NM**	**3.3**	**NM**	**0.29**
rysler	10667.0	19	21280.0	26	685.0	285	1215.0	NM	6.4	2.0	28.6	9	5.22
rd Motor	29419.0	10	56182.0	9	775.0	100	1347.0	121	2.6	1.4	-0.1	NM	-0.06
neral Motors	36658.1**	4	71614.2	6	889.1	NM	1402.3	NM	2.4	NM	-10.4	NM	-1.80
vistar International (2)	1238.0	36	2271.0	25	8.0	NM	3.0	NM	0.6	NM	NM	NM	-0.42
ccar	838.0**	46	1599.4	38	32.8	196	60.2	175	3.9	1.9	9.8	20	3.06
RTS & EQUIPMENT													
OUP COMPOSITE	**6169.1**	**12**	**11919.9**	**12**	**254.2**	**65**	**438.7**	**94**	**4.1**	**2.8**	**15.9**	**17**	**2.23**
vin Industries	520.5	4	996.6	4	16.5	11	22.7	22	3.2	3.0	10.2	16	1.96
mmins Engine	1093.4	15	2141.8	17	48.2	156	89.3	275	4.4	2.0	29.8	12	7.16
ma	1418.3**	14	2741.8	13	36.6	167	60.1	553	2.6	1.1	13.3	19	2.91
naldson (5)	133.4	5	258.5	7	7.7	5	12.9	5	5.8	5.8	16.1	19	1.90
gle-Picher Industries (1)	176.4	10	323.3	10	11.8	27	18.4	38	6.7	5.8	NM	1	3.08
ton	1147.0	8	2233.0	8	53.0	29	103.0	41	4.6	3.9	17.0	18	2.41
alin (4)	515.3	8	952.6	7	28.9	44	44.5	42	5.6	4.2	11.8	21	1.46
cel Industries	138.9	23	266.2	26	4.5	84	7.9	112	3.2	2.2	7.8	23	0.82
deral-Mogul	401.8	29	812.3	34	15.3	248	22.8	356	3.8	1.4	4.7	38	0.56
odine Mfg. (9)	147.2	10	293.0	8	9.9	19	19.4	21	6.7	6.2	15.3	18	1.16
nith (A. O.)	315.8	10	611.9	13	15.1	24	28.1	67	4.8	4.2	14.5	14	3.71
andard Motor Products	161.2	7	289.0	3	6.8	239	9.6	214	4.2	1.3	9.4	18	1.18
RE & RUBBER													
OUP COMPOSITE	**3441.8**	**-2**	**6662.5**	**-1**	**195.5**	**27**	**321.7**	**26**	**5.7**	**4.4**	**21.7**	**15**	**2.45**
ndag	149.0	2	275.5	0	19.3	-11	33.2	-13	12.9	14.7	21.7	17	2.83
oper Tire & Rubber	292.6	-5	572.7	-1	24.0	-4	49.2	12	8.2	8.2	22.1	19	1.36
odyear Tire & Rubber	3000.3	-2	5814.3	-1	152.2	42	239.3	38	5.1	3.5	21.6	14	3.00

cond quarter ended May 31. (2) Second quarter ended Apr. 30. (3) Third quarter and most recent six months ended June 30. (4) Third quarter and most recent six months ended 31. (5) Third quarter and most recent six months ended Apr. 30. (6) Fourth quarter and most recent six months ended June 30. (7) Fourth quarter and most recent six months ended 31. (8) Fourth quarter and most recent six months ended Apr. 30. (9) First quarter and most recent six months ended June 30. (10) First quarter and most recent six months ended 31. (11) First quarter and most recent six months ended Apr. 30. *Sales include excise taxes. **Sales include other income. ***Sales include excise taxes and other income. †Revenues najor subsidiaries not included in consolidated sales. Earnings per share are for latest 12 months, not necessarily for end of most recent fiscal year; they include all common stock alents but exclude extraordinary items. NA=not available. NM=not meaningful. DATA: STANDARD & POOR'S COMPUSTAT SERVICES, A DIVISION OF McGRAW-HILL, INC.

CORPORATE SCOREBOARD

COMPANY	SALES 2ND QUARTER 1993 $ MIL	SALES CHANGE FROM 1992 %	SALES 6 MONTHS 1993 $ MIL	SALES CHANGE FROM 1992 %	PROFITS 2ND QUARTER 1993 $ MIL	PROFITS CHANGE FROM 1992 %	PROFITS 6 MONTHS 1993 $ MIL	PROFITS CHANGE FROM 1992 %	MARGINS 2ND QUARTER 1993 %	MARGINS 2ND QUARTER 1992 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-23	12 MONTH EARNIN PER SHAR
3 BANKS													
INDUSTRY COMPOSITE	**52090.4**	**1**	**103817.9**	**0**	**6178.2**	**52**	**11203.8**	**39**	**11.9**	**7.8**	**13.4**	**12**	**3.2**
(a) BANKS - EAST													
GROUP COMPOSITE	**27789.2**	**3**	**55286.5**	**1**	**2831.2**	**60**	**4718.5**	**38**	**10.2**	**6.5**	**13.5**	**11**	**3.4**
Bank of Boston	1468.6	11	2806.9	7	65.5	47	115.6	38	4.5	3.4	10.5	10	2.2
Bank of New York	888.0	1	1769.0	−2	131.0	51	256.0	53	14.8	9.9	12.9	10	5.2
Bankers Trust New York	1899.0	9	3654.0	10	251.0	35	481.0	41	13.2	10.7	22.6	8	10.0
Chase Manhattan	2751.0	−1	5570.0	−1	233.0	53	−114.0	NM	8.5	5.5	1.8	50	0.6
Chemical Banking	3174.0	5	6223.0	−1	381.0	59	720.0	44	12.0	7.9	13.6	9	4.6
Citicorp	7798.0	0	15709.0	0	446.0	212	816.0	150	5.7	1.8	10.9	14	2.2
First Fidelity Bancorporation	608.2	−1	1207.7	−3	97.9	28	192.9	36	16.1	12.5	16.3	11	4.3
Fleet Financial Group	1203.4	2	2327.1	1	118.7	68	224.9	86	9.9	6.0	12.4	14	2.4
Integra Financial	275.0	−1	558.4	1	38.5	48	78.3	61	14.0	9.3	18.1	9	5.1
KeyCorp	729.2	8	1409.6	5	99.9	32	194.8	31	13.7	11.3	15.3	11	3.5
Mellon Bank	758.0	6	1557.0	4	99.0	10	133.0	−24	13.1	12.6	14.3	9	5.8
Midlantic	252.6	−28	513.2	−30	40.9	424	25.4	NM	16.2	2.2	6.1	22	1.0
MNC Financial	348.7	−10	712.9	−10	31.8	NM	66.9	NM	9.1	0.5	11.9	10	1.4
Morgan (J. P.)	2945.0	10	5829.0	14	431.0	33	863.0	47	14.6	12.2	21.9	9	7.7
PNC Bank	994.9	−1	2068.7	0	169.1	33	356.2	41	17.0	12.7	15.9	11	2.7
Republic New York	566.9	−1	1139.4	−2	74.9	17	143.7	16	13.2	11.1	14.2	11	4.7
Shawmut National	484.9	−2	959.8	−9	56.3	784	39.8	0	11.6	1.3	3.4	49	0.4
State Street Boston	377.1	7	734.5	5	43.2	12	85.9	15	11.5	11.0	17.3	15	2.2
UJB Financial	266.6	−7	537.3	−6	22.4	119	39.0	97	8.4	3.6	7.7	18	1.4
(b) BANKS - MIDWEST													
GROUP COMPOSITE	**10034.4**	**1**	**19972.8**	**−1**	**1425.3**	**39**	**2786.7**	**36**	**14.2**	**10.3**	**13.7**	**15**	**2.4**
Banc One	1788.7	−2	3604.4	−3	281.9	16	549.4	29	15.8	13.3	16.6	19	2.87
Boatmen's Bancshares	511.1	1	996.1	−1	76.2	29	146.5	28	14.9	11.7	14.1	13	4.90
Comerica	557.5	−6	1114.4	−8	83.7	NM	166.9	153	15.0	NM	16.2	11	2.82
Continental Bank	409.0	−6	850.0	−7	61.0	20	122.0	13	14.9	11.8	14.3	6	3.67
Fifth Third Bancorp	237.6	6	469.0	7	47.9	18	92.5	21	20.2	18.1	16.8	18	3.07
First Bank System	557.9	0	1117.6	−1	33.5	−43	111.0	0	6.0	10.4	6.4	27	1.14
First Chicago	1152.0	12	2301.7	7	168.5	388	347.6	187	14.6	3.4	1.8	78	0.57
Firstar	300.5	1	597.8	0	50.4	23	100.4	29	16.8	13.8	16.9	11	2.94
Huntington Bancshares	348.8	1	680.4	3	53.2	49	103.3	49	15.2	10.3	18.1	13	1.98
Mercantile Bancorporation	225.5	−2	451.1	1	28.1	18	55.3	21	12.5	10.3	12.7	11	4.59
Michigan National	240.5	−4	463.1	−9	16.1	−16	−28.7	NM	6.7	7.6	−0.7	NM	−0.37
National City	670.9	−4	1329.2	−7	102.5	20	197.8	18	15.3	12.2	15.1	12	2.26
NBD Bancorp	802.0	−5	1613.9	−5	122.6	35	237.7	25	15.3	10.8	13.7	12	2.80
Northern Trust	312.7	0	621.0	0	41.6	12	81.8	12	13.3	11.9	17.3	14	2.75
Norwest	1330.6	12	2584.5	9	161.1	26	311.3	29	12.1	10.7	16.5	17	1.63
Society	589.1	−5	1178.6	−6	96.9	11	191.9	46	16.5	14.2	19.1	11	3.02
(c) BANKS - SOUTH & SOUTHEAST													
GROUP COMPOSITE	**7119.1**	**−1**	**14152.2**	**−4**	**1025.2**	**36**	**1973.1**	**31**	**14.4**	**10.5**	**14.2**	**12**	**3.49**
AmSouth Bancorporation	227.3	11	449.9	9	35.0	41	68.6	41	15.4	12.1	13.4	11	2.92
Barnett Banks	790.6	−8	1595.6	−9	104.2	66	196.5	51	13.2	7.3	10.3	18	2.66
Crestar Financial	267.8	−1	530.3	−4	33.7	101	64.6	112	12.6	6.2	10.9	13	3.13
First Union	1423.7	1	2794.9	0	226.8	74	426.8	99	15.9	9.3	14.8	10	4.50
NationsBank	2408.0	0	4783.0	−7	306.0	22	587.0	5	12.7	10.4	14.1	11	4.62
Signet Banking	282.7	6	553.1	5	40.4	51	78.7	61	14.3	10.0	16.2	11	2.46
SouthTrust	273.4	14	535.8	14	37.2	36	72.1	35	13.6	11.5	14.4	11	1.80
SunTrust Banks	770.8	−5	1545.3	−6	118.8	12	234.3	12	15.4	13.0	15.8	13	3.52
Wachovia	674.9	−3	1364.4	−4	123.1	13	244.7	14	18.2	15.7	16.2	13	2.68
(d) BANKS - WEST & SOUTHWEST													
GROUP COMPOSITE	**7147.7**	**−5**	**14406.5**	**4**	**896.4**	**78**	**1725.4**	**60**	**12.5**	**6.7**	**12.2**	**11**	**4.30**
Bancorp Hawaii	232.2	−2	465.2	−3	33.8	5	66.7	7	14.5	13.5	14.1	10	4.24
BankAmerica	3939.0	−3	7953.0	15	488.0	103	972.0	79	12.4	5.9	13.0	9	4.80
First Interstate Bancorp	970.5	−7	1956.2	−8	136.0	111	255.6	104	14.0	6.2	11.8	14	4.71
U.S. Bancorp	484.9	1	957.8	−1	63.6	19	125.1	25	13.1	11.1	14.2	12	2.23
Union Bank	310.1	−12	634.3	−11	26.1	−21	49.1	5	8.4	9.4	9.5	10	2.84
Wells Fargo	1211.0	−8	2440.0	−8	149.0	82	257.0	28	12.3	6.2	8.9	21	5.22
4 CHEMICALS													
INDUSTRY COMPOSITE	**33038.6**	**0**	**63492.1**	**−1**	**1221.4**	**−11**	**2908.0**	**3**	**3.7**	**4.2**	**8.9**	**29**	**1.30**
Air Products & Chemicals (3)	824.8	0	1658.7	3	70.8	4	146.1	3	8.6	8.3	13.5	16	2.52
American Cyanamid	1507.0	2	2908.3	2	−228.7	NM	−110.0	NM	NM	10.0	1.0	NM	0.26
Arco Chemical	803.0	4	1570.0	3	47.0	161	99.0	25	5.9	2.3	13.4	18	2.26
Betz Laboratories	171.5	−2	340.0	−3	18.8	−8	38.0	−6	11.0	11.6	22.9	17	2.61
Crompton & Knowles	147.7	10	281.4	13	15.7	22	27.9	23	10.6	9.6	22.1	24	0.95
Dow Chemical	4822.0**	−1	9185.0	−3	149.0	−23	551.0	49	3.1	4.0	5.4	36	1.64
DuPont	9546.0***	−2	18616.0	−2	516.0	86	1009.0	41	5.4	2.8	10.7	26	1.87
Engelhard	563.2**	−12	1053.4	−17	28.5	11	50.7	5	5.1	4.0	15.8	23	1.57

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CORPORATE SCOREBOARD

ıPANY	SALES 2ND QUARTER 1993 $ MIL	SALES CHANGE FROM 1992 %	SALES 6 MONTHS 1993 $ MIL	SALES CHANGE FROM 1992 %	PROFITS 2ND QUARTER 1993 $ MIL	PROFITS CHANGE FROM 1992 %	PROFITS 6 MONTHS 1993 $ MIL	PROFITS CHANGE FROM 1992 %	MARGINS 2ND QUARTER 1993 %	MARGINS 2ND QUARTER 1992 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-23	12 MONTHS' EARNINGS PER SHARE
	873.0	32	1702.0	27	30.8	78	57.2	31	3.5	2.6	14.4	11	1.77
)	280.5	−4	538.6	−5	13.6	−8	26.7	−3	4.8	5.0	16.8	16	1.86
oort-McMoRan	337.7	−34	638.5	−27	−83.8	NM	−114.6	NM	NM	5.6	18.7	NM	0.12
r (H. B.) (1)	247.3	4	475.3	4	8.9	−13	11.8	−27	3.6	4.3	12.5	16	2.23
ı	245.1	−5	480.0	−2	5.2	−35	5.3	−13	2.1	3.1	−8.4	NA	NA
gia Gulf	195.2	1	377.1	−1	11.5	−15	21.6	−18	5.9	7.0	NM	19	0.99
drich (B. F.)	452.7	−31	829.2	−34	56.2	389	48.6	406	12.4	1.8	3.1	55	0.82
e (W. R.)	1094.1	3	2000.3	0	53.9	5	85.6	26	4.9	4.8	5.3	45	0.92
ıt Lakes Chemical	461.8	21	892.0	23	70.1	19	134.3	20	15.2	15.4	23.1	19	3.57
ıa (M. A.)	396.7**	19	767.0	22	8.3	30	12.7	45	2.1	1.9	7.3	17	1.53
te	158.1	3	307.2	2	17.4	50	37.1	19	11.0	7.5	22.7	17	2.17
izol	394.3	−5	761.7	−9	31.3	−30	66.8	−25	7.9	10.8	13.0	20	1.50
dell Petrochemical	1080.0	−11	2144.0	−5	−11.0	NM	−19.0	NM	NM	0.8	NM	NM	0.14
santo	2230.0	9	4171.0	4	200.0	111	341.0	42	9.0	4.6	−0.9	NM	−0.13
o Chemical	347.5	2	686.5	3	38.1	5	73.2	5	11.0	10.7	27.3	17	1.95
ıdustries	221.4	−6	419.9	−9	−28.0	NM	−41.5	NM	NM	NM	NM	NM	−1.38
	625.5	−1	1217.4	−2	14.3	−32	26.0	−42	2.3	3.3	2.8	34	1.29
air	623.0	−6	1217.0	−7	38.0	19	71.0	13	6.1	4.8	15.8	23	0.69
ntum Chemical	527.5**	−3	1172.2	0	−51.8	NM	−67.0	NM	NM	NM	NM	NM	−4.17
n & Haas	884.0**	13	1710.0	14	63.0	−15	122.0	−7	7.1	9.5	11.9	22	2.33
lman (A.) (4)	185.1	−3	345.1	−5	10.4	−12	18.3	−15	5.6	6.2	13.3	21	1.34
ing Chemicals (3)	132.3	9	245.3	17	−0.4	NM	−3.0	NM	NM	5.3	−4.1	NM	−0.05
ı Industries	653.2**	11	820.3	5	39.6	37	30.8	30	6.1	4.9	7.0	18	0.26
n Carbide	1244.0	−1	2437.0	0	41.0	14	83.0	6	3.3	2.9	7.2	25	0.76
man	214.0	4	422.0	2	12.8	−11	34.6	29	6.0	7.0	11.9	10	1.83
o	549.4	29	1102.6	30	14.9	−17	33.7	−9	2.7	4.2	6.6	25	2.14
NGLOMERATES													
STRY COMPOSITE	**41086.5**	**3**	**78820.6**	**3**	**1821.5**	**−3**	**3774.5**	**8**	**4.4**	**4.7**	**12.2**	**25**	**2.51**
Standard (3)	1547.2**	25	3037.8	25	30.7	7	60.2	16	2.0	2.3	12.3	19	2.36
dSignal	3055.0	−1	5956.0	−2	170.0	21	319.0	22	5.6	4.6	25.5	17	4.18
c Industries	334.6	−7	674.5	−3	6.0	−74	23.5	14	1.8	6.5	NM	17	0.98
Group (11)	317.3	7	660.6	6	0.6	−77	−1.1	NM	0.2	0.8	0.6	94	0.85
	905.5	−1	1684.2	−1	39.7	20	54.3	22	4.4	3.6	9.1	46	0.83
ie International	292.4	2	574.2	−2	3.5	−24	9.8	−28	1.2	1.6	6.1	13	1.41
eral Electric	14761.0**	4	27617.0	4	656.0	−42	1741.0	−17	4.4	8.0	16.6	21	4.63
eral Host (11)	188.0	9	352.7	12	6.6	−7	7.2	−7	3.5	4.1	1.3	58	0.14
ourt General (2)	1029.3**	11	1971.5	9	5.8	NM	37.6	59	0.6	NM	13.6	23	1.61
	5506.0	3	10619.0	2	317.0	199	492.0	102	5.8	2.0	−0.7	NM	−0.46
(5)	172.5	−2	340.0	−1	25.0	−8	28.3	−39	14.5	15.4	14.4	26	0.66
ı Central	397.3	16	753.6	13	75.0	570	106.1	391	18.9	3.3	9.1	13	3.00
nark International	763.2	4	1469.3	4	41.0	39	65.0	34	5.4	4.0	2.9	99	0.61
:well International (3)	2813.0	4	5507.1	1	147.2	20	284.1	28	5.2	4.5	19.4	13	2.49
dyne	624.4	−16	1260.9	−14	8.1	9	41.9	118	1.3	1.0	24.9	19	1.24
eco	3482.0	1	6729.0	1	111.0	122	185.0	118	3.2	1.5	−44.6	NM	−4.29
ron	2252.2	4	4416.1	6	94.3	17	177.1	18	4.2	3.7	13.7	14	3.93
	2011.0	−7	4040.0	−4	55.0	0	106.0	15	2.7	2.6	14.0	19	3.26
ıman	634.7	4	1157.2	5	29.1	15	37.5	22	4.6	4.2	21.7	15	0.92
NSUMER PRODUCTS													
STRY COMPOSITE	**56228.8**	**5**	**110285.0**	**6**	**3870.1**	**−2**	**7501.9**	**5**	**6.9**	**7.3**	**23.5**	**16**	**2.00**
AREL													
UP COMPOSITE	**4875.9**	**7**	**9852.3**	**7**	**249.3**	**13**	**555.0**	**8**	**5.1**	**4.9**	**14.2**	**16**	**1.88**
vn Group (11)	463.9	6	913.7	5	4.2	NM	13.3	NM	0.9	NM	10.3	19	1.72
marx (1)	171.9	−37	358.8	−38	−3.5	NM	−4.7	NM	NM	NM	NM	NM	−8.26
wood (8)	309.0	23	544.9	20	10.4	27	12.8	25	3.4	3.3	10.3	14	2.08
laiborne	506.9	7	1038.3	1	31.1	−21	72.1	−30	6.1	8.4	18.7	9	2.28
(7)	983.3	16	1955.3	14	76.9	9	166.4	9	7.8	8.3	23.1	12	4.74
ord Industries (7)	134.4	−1	275.0	5	3.6	12	7.1	15	2.7	2.4	13.1	10	1.70
ips-Van Heusen (11)	221.9	7	494.4	12	−2.2	NM	7.5	−11	NM	NM	17.2	20	1.33
ook International	657.6	−6	1482.8	−1	41.0	−10	108.8	1	6.2	6.5	13.6	21	1.27
ell	209.1	12	413.7	8	12.7	2	28.7	3	6.1	6.7	14.3	14	2.02
le Rite (1)	164.5	−4	305.3	−2	19.4	−11	34.5	−11	11.8	12.7	19.6	13	1.12
	1053.4	24	2070.1	24	55.7	21	108.5	21	5.3	5.4	17.7	10	4.15
LIANCES & HOME FURNISHINGS													
UP COMPOSITE	**7750.3**	**10**	**15678.8**	**11**	**271.7**	**28**	**462.5**	**19**	**3.5**	**3.0**	**7.5**	**36**	**0.73**
strong World Industries	629.0	−3	1240.9	−4	31.9	63	43.2	23	5.1	3.0	−13.3	NM	−1.81
ett Furniture Industries (1)	128.9	13	249.2	13	7.1	6	13.2	3	5.5	5.8	9.9	15	1.93
Buy (10)	441.9	79	1055.5	80	1.5	22	12.3	94	0.3	0.5	11.0	22	1.73
it City Stores (10)	799.0	24	1897.2	23	17.2	51	78.0	41	2.2	1.8	20.2	23	1.21
d Guys (3)	125.8	10	242.2	5	0.8	NM	1.2	54	0.7	0.0	4.9	26	0.38
ig-Meyers (10)	186.8**	24	369.2	24	13.5	29	23.1	33	7.2	6.9	10.4	28	0.90
-Boy Chair (8)	198.4	13	368.2	14	11.6	35	18.0	32	5.8	4.9	10.4	20	1.50
d Furniture	133.8	7	270.0	11	2.4	50	4.1	69	1.8	1.3	4.4	35	0.28

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CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS				
	2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	2ND QUARTER 1993 %	2ND QUARTER 1992 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-23	MK EA
Leggett & Platt	333.8	18	654.7	15	20.1	36	38.9	35	6.0	5.2	16.4	21	
Levitz Furniture (9)	230.5	10	467.6	10	−0.4	NM	−6.5	NM	NM	NM	NM	NM	–
Masco	948.0	9	1894.0	10	53.3	10	107.8	21	5.6	5.6	10.5	21	
Maytag	753.3	−2	1470.1	−3	21.3	13	10.8	−75	2.8	2.5	−7.0	NM	–
Pier 1 Imports (10)	158.6	4	324.4	8	4.7	−42	10.0	−21	3.0	5.3	9.8	18	
Sunbeam-Oster	293.4	14	582.8	11	24.7	48	48.5	48	8.4	6.5	14.8	20	
Toro (5)	241.3	7	394.5	2	12.7	36	14.6	NM	5.3	4.1	−3.3	NM	–
Whirlpool	1873.0**	5	3633.0	5	74.0	40	92.0	5	4.0	3.0	14.8	21	
Zenith Electronics	274.7	−2	565.2	4	−24.7	NM	−46.5	NM	NM	NM	−57.7	NM	–
(c) **BEVERAGES**													
GROUP COMPOSITE	**15360.1**	**9**	**28193.4**	**8**	**1517.1**	**19**	**2481.9**	**15**	**9.9**	**9.0**	**28.5**	**23**	
Anheuser-Busch	2990.8	1	5494.2	−1	308.6	0	502.7	−4	10.3	10.4	21.2	13	
Brown-Forman (8)	342.1	12	695.3	12	32.5	3	69.8	6	9.5	10.3	19.3	15	
Coca-Cola	3899.0	10	6955.0	10	678.0	20	1132.0	19	17.4	15.9	52.1	28	
Coca-Cola Bottling Consolidated	194.5	12	348.8	8	6.0	266	7.4	NM	3.1	0.9	28.1	36	
Coca-Cola Enterprises	1448.0	4	2656.0	6	16.0	NM	11.0	NM	1.1	NM	−0.2	NM	–
Coors (Adolph)	412.9	1	708.9	2	18.9	26	23.5	64	4.6	3.7	6.5	16	
Dr Pepper/Seven-Up	182.5	5	353.3	5	30.3	NM	48.3	NM	16.6	NM	NM	36	
PepsiCo	5890.3	15	10981.9	14	426.8	13	687.2	12	7.2	7.4	24.8	22	
(d) **PERSONAL CARE**													
GROUP COMPOSITE	**5218.7**	**1**	**10321.2**	**3**	**394.1**	**3**	**787.6**	**18**	**7.6**	**7.4**	**28.5**	**18**	
Alberto-Culver (3)	289.6	4	578.0	4	10.1	10	21.3	10	3.5	3.3	13.8	19	
Avon Products	949.3	7	1791.2	6	65.6	10	90.2	407	6.9	6.8	130.3	17	
Block Drug (9)	150.5	−2	305.3	2	15.7	−2	30.5	−1	10.4	10.4	12.6	14	
Colgate-Palmolive	1775.1	1	3477.8	2	142.4	14	283.2	19	8.0	6.9	21.9	16	
Ecolab	257.8	4	498.6	4	19.2	34	31.8	24	7.4	5.8	20.4	19	
Gillette	1237.3	3	2453.9	2	134.7	12	277.0	11	10.9	10.1	38.3	21	
Helene Curtis Industries (10)	243.4	−1	577.5	7	0.8	−67	8.1	−11	0.3	1.0	11.0	13	
NCH (8)	166.7	−1	335.5	−2	9.1	17	16.7	−7	5.5	4.6	13.1	14	
Tambrands	149.0	−12	303.4	−12	−3.4	NM	28.8	−50	NM	16.8	53.1	18	
(e) **TOBACCO**													
GROUP COMPOSITE	**23023.8**	**0**	**46239.3**	**3**	**1437.9**	**−22**	**3214.9**	**−6**	**6.2**	**8.0**	**26.7**	**9**	
American Brands	2846.0**	−12	6583.6	−7	151.3	−25	398.4	−11	5.3	6.2	19.9	8	
Culbro (1)	389.6***	30	676.3	20	1.8	−24	0.1	−92	0.5	0.8	0.2	NM	
Philip Morris	15789.0**	4	30978.0	6	1053.0	−22	2271.0	−7	6.7	8.9	39.9	9	
RJR Nabisco Holdings	3719.0	−7	7455.0	−2	142.0	−32	352.0	0	3.8	5.2	9.0	10	
UST	280.3*	7	546.5	10	89.8	15	193.4	31	32.1	29.7	73.6	18	
7 **CONTAINERS & PACKAGING**													
INDUSTRY COMPOSITE	**6716.9**	**2**	**12889.9**	**4**	**157.0**	**−27**	**256.7**	**−30**	**2.3**	**3.3**	**6.0**	**30**	
(a) **GLASS, METAL & PLASTIC**													
GROUP COMPOSITE	**2749.1**	**10**	**5029.0**	**9**	**117.0**	**15**	**178.2**	**18**	**4.3**	**4.1**	**15.2**	**16**	
Ball	665.5	11	1200.2	10	13.3	−29	22.4	−24	2.0	3.1	8.3	16	
Crown Cork & Seal	1168.6	15	2081.7	12	56.6	16	86.0	15	4.8	4.8	13.7	18	
Owens-Illinois	915.0	4	1747.1	4	47.1	37	69.8	49	5.1	3.9	36.5	13	
(b) **PAPER**													
GROUP COMPOSITE	**3967.8**	**−1**	**7860.9**	**1**	**40.0**	**−65**	**78.5**	**−64**	**1.0**	**2.8**	**2.7**	**61**	
Bemis	303.3	2	595.9	2	15.5	0	26.3	0	5.1	5.2	15.8	20	
Federal Paper Board	329.6	−5	649.4	−3	9.8	−61	18.9	−55	3.0	7.3	5.7	18	
Greif Bros. (2)	133.9	4	258.9	3	6.0	−30	11.3	−18	4.4	6.6	9.4	17	
Longview Fibre (2)	179.0	4	334.9	3	13.4	38	18.5	36	7.5	5.6	9.5	22	
Nashua	141.7	5	282.7	10	3.9	NM	6.5	NM	2.7	0.1	9.5	17	
Paragon Trade Brands	138.5	18	280.3	24	6.6	66	14.2	57	4.8	3.4	NA	NA	
Riverwood International	293.2	4	553.9	4	3.8	−73	9.6	−65	1.3	4.9	5.4	34	
Sonoco Products	478.5	4	945.4	6	31.8	10	58.7	15	6.6	6.3	15.5	20	
Stone Container	1267.6	−8	2573.9	−6	−71.6	NM	−134.3	NM	NM	NM	−28.8	NM	
Temple-Inland	702.6	3	1385.4	3	20.9	−56	48.9	−41	3.0	7.0	6.7	22	
8 **DISCOUNT & FASHION RETAILING**													
INDUSTRY COMPOSITE	**81549.6**	**7**	**182018.1**	**9**	**2307.2**	**81**	**6280.2**	**163**	**2.8**	**1.7**	**10.6**	**29**	
Ames Department Stores (11)	437.2	−10	1188.7	−9	−18.0	NM	−407.0	NM	NM	NM	NM	NA	
AutoZone (4)	282.8	18	525.1	20	19.8	38	35.9	43	7.0	6.0	21.8	44	
Baker (J.) (11)	193.4	77	345.7	40	2.5	60	7.4	84	1.3	1.4	8.0	16	
Blair	137.3**	2	256.8	1	9.4	−10	15.4	−16	6.8	7.8	19.6	14	
Bradlees (11)	459.4	0	1045.8	3	−9.5	NM	21.3	1	NM	NM	10.9	NA	
Caldor (11)	463.9	12	1214.4	16	−4.3	NM	32.0	32	NM	NM	14.5	11	
Carter Hawley Hale Stores (11)	463.7**	2	1217.0	4	−10.4	NM	17.5	NM	NM	NM	237.5	NA	
Charming Shoppes (11)	275.3	5	612.5	10	16.2	1	42.1	18	5.9	6.1	17.5	18	
CML Group (5)	169.4	22	405.7	31	15.0	97	47.6	62	8.9	5.5	31.7	19	
Consolidated Stores (11)	210.2	9	515.6	16	1.3	−61	24.8	22	0.6	1.8	16.6	22	
Costco Wholesale (4)	1705.7	14	3538.4	15	17.7	−13	51.7	4	1.0	1.4	12.9	16	
Dayton Hudson (11)	4040.0**	9	9941.0	11	30.0	−14	279.0	23	0.7	0.9	14.3	13	

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CORPORATE SCOREBOARD

MPANY	SALES 2ND QUARTER 1993 $ MIL.	CHANGE FROM 1992 %	SALES 6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	PROFITS 2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	PROFITS 6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	MARGINS 2ND QUARTER 1993 %	MARGINS 2ND QUARTER 1992 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-23	12 MONTHS' EARNINGS PER SHARE
rd Department Stores (11)	1210.6**	13	2792.7	15	48.2	7	158.6	15	4.0	4.2	12.7	17	2.14
ar General (11)	221.8	18	513.5	19	5.9	53	22.7	40	2.7	2.1	19.3	30	1.10
on Brothers Stores (11)	329.2	1	800.7	4	6.9	−28	42.5	10	2.1	2.9	16.3	10	3.13
Distributors (11)	174.6	−1	364.6	3	1.4	−31	5.9	−33	0.8	1.1	16.4	8	1.34
i-Centers of America (11)	139.8	11	325.3	20	−1.7	NM	7.2	−48	NM	1.9	0.7	NM	0.11
ily Dollar Stores (4)	310.1	11	666.5	12	17.5	15	38.2	15	5.6	5.4	20.0	16	1.13
rated Department Stores (11)	1590.3**	1	3852.3	4	21.7	84	126.8	NM	1.4	0.8	6.8	20	1.11
erhut	420.8	17	792.6	19	13.0	16	20.7	0	3.1	3.1	14.7	19	2.42
(11)	643.6	9	1573.8	13	41.5	−8	107.2	−17	6.5	7.7	22.2	20	1.44
esco (11)	128.4	14	279.2	17	−0.7	NM	3.5	550	NM	NM	6.3	19	0.42
sman's	253.1	1	394.7	−2	5.7	13	−2.5	NM	2.2	2.0	1.9	28	0.11
inger (11)	479.1	9	894.9	12	3.2	NM	6.0	NM	0.7	NM	5.9	15	0.67
Department Stores (11)	340.4	−5	925.3	2	−11.1	NM	18.0	72	NM	NM	NM	0	1.39
e Depot (11)	2180.2	33	3998.7	36	106.8	34	203.9	39	4.9	4.8	16.1	49	0.88
e Shopping Network (4)	260.2	−3	504.2	−7	6.2	−31	−13.8	NM	2.4	3.3	−0.4	NM	−0.01
se of Fabrics (11)	128.0	1	285.7	2	−0.7	NM	1.5	−86	NM	2.1	1.0	68	0.13
esway (11)	157.7	−14	406.7	−7	−8.0	NM	−51.2	NM	NM	NM	−88.6	NM	−3.72
rt (11)	9092.0**	9	20734.0	9	50.0	−57	585.0	−2	0.6	1.4	12.6	11	1.92
r's (11)	250.2	18	632.6	19	7.5	168	30.0	81	3.0	1.3	15.5	39	0.93
ls' End (11)	156.3	11	435.8	6	4.2	−1	25.4	3	2.7	3.0	23.4	16	1.87
ted (11)	1518.6**	7	3946.5	14	44.2	−14	288.1	14	2.9	3.6	19.6	17	1.23
e's (11)	992.1	12	1902.4	19	29.4	24	41.8	NM	3.0	2.7	11.8	30	1.24
Frugal's Bargains (11)	126.7	11	324.1	7	5.9	9	29.0	12	4.6	4.7	5.1	34	0.41
y (R. H.) (5)	1336.7**	2	3373.9	0	−228.0	NM	−219.0	NM	NM	NM	NM	NA	NM
Department Stores (11)	2422.0**	1	6027.0	5	96.0	19	415.0	20	4.0	3.4	18.7	16	2.42
ville	2537.4	2	4570.4	0	74.5	−3	52.8	−17	2.9	3.1	6.4	36	1.23
cantile Stores (11)	572.3**	−3	1467.3	6	11.5	40	66.3	35	2.0	1.4	7.1	13	2.45
ry-Go-Round Enterprises (11)	185.9	8	480.6	14	2.0	−72	16.0	249	1.1	4.1	13.8	15	0.62
er (Fred) (11)	852.1	3	1610.1	5	14.0	21	39.8	26	1.6	1.4	13.6	15	2.26
man Marcus Group (5)	456.5**	9	1073.7	12	11.1	23	28.7	41	2.4	2.2	64.4	29	0.52
dstrom (11)	695.6	5	1764.8	7	11.3	−48	61.3	−2	1.6	3.3	12.0	17	1.55
ida Holdings (11)	141.3	3	308.0	2	−2.4	NM	−0.5	NM	NM	NM	18.5	15	0.23
less Cashways (1)	698.8	2	1191.6	3	7.1	103	−14.1	NM	1.0	0.5	−2.5	NA	NA
ney (J.C.) (11)	4107.0**	4	10334.0	9	172.0	26	547.0	216	4.2	3.4	17.4	13	3.30
Boys–Manny, Moe & Jack (11)	299.1	9	571.2	10	13.4	24	25.8	26	4.5	3.9	11.0	22	0.93
ie Stores (11)	331.8	3	759.9	7	1.8	−74	12.6	−7	0.5	2.1	1.5	NM	0.21
e (4)	1767.1**	4	3445.0	6	17.1	−40	34.4	−30	1.0	1.7	12.7	14	2.34
Network (11)	273.2**	17	615.1	19	17.6	53	37.6	76	6.5	4.9	12.2	47	1.42
e's Stores (11)	279.0	−4	732.1	3	1.2	NM	−35.0	NM	0.4	NM	−61.5	NM	−2.75
s Stores (11)	239.6	8	560.8	12	3.6	10	19.8	17	1.5	1.5	16.1	11	1.33
rs, Roebuck	12156.9	−4	23454.7	−4	1093.6	433	1410.6	321	9.0	1.6	−15.7	NM	−4.22
vice Merchandise	803.1	3	1476.0	2	8.4	40	−2.4	NM	1.0	0.8	46.3	14	0.83
pKo Stores (10)	474.6	1	903.4	−2	6.3	−42	23.8	−26	1.3	2.3	12.8	8	1.43
egel	515.8	11	1016.1	14	4.0	NM	6.9	495	0.8	0.0	9.5	26	0.86
wbridge & Clothier (11)	197.2**	−4	529.2	−3	−4.3	NM	18.0	5	NM	NM	6.3	15	1.45
(11)	785.6	17	1783.2	21	22.7	50	52.0	78	2.9	2.3	26.0	19	1.48
s 'R' Us (11)	1286.5	10	4688.3	16	35.4	25	375.2	29	2.8	2.4	15.5	24	1.49
. Shoe (11)	640.3	−1	1328.6	−1	−9.7	NM	−8.8	NM	NM	0.4	−1.7	NM	−0.17
ue City Department Stores (5)	166.5**	−5	435.2	2	0.6	−86	19.1	−7	0.4	2.5	19.1	15	1.00
ture Stores (11)	363.6**	0	939.1	6	2.3	−59	34.2	1	0.6	1.5	21.6	6	2.59
ban (11)	834.2	13	1771.9	20	4.4	−28	18.5	10	0.5	0.8	9.6	10	1.27
l-Mart Stores (11)	13920.4	20	31042.4	23	450.7	16	1200.2	21	3.2	3.3	22.5	28	0.90
olworth (11)	2135.0**	2	5270.0	1	1.0	−94	166.0	NM	0.0	0.8	13.0	13	2.02
nkers (11)	132.7**	89	340.9	84	1.1	NM	16.2	250	0.8	NM	14.6	6	3.47
ECTRICAL & ELECTRONICS													
USTRY COMPOSITE	**30232.9**	**11**	**58755.9**	**11**	**2049.0**	**194**	**3913.8**	**96**	**6.8**	**2.6**	**14.3**	**19**	**2.19**
CTRICAL PRODUCTS DUP COMPOSITE	**5496.7**	**0**	**10583.6**	**1**	**273.8**	**0**	**475.1**	**2**	**5.0**	**5.0**	**10.8**	**21**	**1.30**
eman	193.9**	10	346.5	17	19.7	17	29.6	21	10.2	9.6	15.7	22	1.23
per Industries	1611.7**	5	3082.9	2	102.9	−6	166.0	−5	6.4	7.1	10.5	19	2.62
bbell	211.3	8	409.3	7	25.0	3	49.0	2	11.8	12.5	17.2	18	3.01
tional Service Industries (4)	460.0	11	887.0	10	20.5	4	35.1	−1	4.5	4.8	10.7	18	1.50
ychem (6)	361.1	3	685.1	3	0.5	NM	0.9	NM	0.1	NM	1.2	NM	0.19
iance Electric	413.0	8	801.0	6	9.0	−25	21.0	17	2.2	3.1	11.6	21	0.86
mas & Betts	264.8	0	531.9	1	12.2	−19	25.5	68	4.6	5.7	13.0	19	3.26
stinghouse Electric	1981.0	−9	3840.0	−5	84.0	−18	148.0	−12	4.2	4.7	11.6	21	0.79
CTRONICS DUP COMPOSITE	**12933.1**	**11**	**25325.5**	**10**	**779.4**	**NM**	**1479.9**	**329**	**6.0**	**NM**	**13.2**	**20**	**2.74**
ystems	533.5	10	1064.9	8	30.0	13	57.4	12	5.6	5.5	16.4	12	3.53
neral Instrument	311.8	20	615.0	25	12.3	762	23.5	NM	3.9	0.6	3.0	NM	0.14
Hughes Electronics	3309.4	12	6479.0	10	232.0	NM	421.3	NM	7.0	NM	11.4	17	2.02
on Industries (5)	1407.1	−8	2666.3	−8	49.5	11	93.9	7	3.5	2.9	12.8	15	4.40

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CORPORATE SCOREBOARD

COMPANY	SALES				PROFITS				MARGINS				
	2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	2ND QUARTER 1993 %	2ND QUARTER 1992 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-23	M EA
Loral (9)	849.5	25	1823.5	24	40.4	65	97.7	51	4.8	3.6	14.7	12	
Motorola	3936.0	25	7562.0	22	224.0	57	428.0	60	5.7	4.6	12.9	33	
Raytheon	2258.0	-3	4461.5	0	179.3	B	336.8	9	7.9	7.1	16.8	12	
Varian Associates (3)	327.9	6	653.2	4	12.0	18	21.3	19	3.7	3.3	9.9	23	
(c) **INSTRUMENTS GROUP COMPOSITE**	**4640.2**	**6**	**9091.1**	**4**	**58.8**	**-66**	**192.0**	**-47**	**1.3**	**4.0**	**10.1**	**23**	
Ametek	186.8	-4	373.9	-5	6.2	-47	12.3	-47	3.3	6.0	16.3	17	
Beckman Instruments	221.8	-1	423.5	-3	11.7	9	21.9	10	5.3	4.8	13.0	14	
Honeywell	1452.0	-2	2890.6	-3	71.4	-13	128.7	-34	4.9	5.5	19.0	15	
Imo Industries	209.0	-15	412.0	-13	1.8	122	-0.7	NM	0.8	0.3	-24.3	NM	-
Johnson Controls (3)	1593.7	22	3038.8	22	42.2	16	63.5	20	2.6	2.8	12.9	16	
Millipore	199.4	6	391.3	2	12.8	165	13.6	-32	6.4	2.6	7.4	25	
Perkin-Elmer (5)	285.1	3	629.6	7	-12.9	NM	12.7	-63	NM	5.9	10.5	28	
Tektronix (7)	353.0	14	664.3	-6	-82.1	NM	-73.0	NM	NM	2.0	-13.4	NM	-
Teradyne	139.3	3	267.1	-1	7.7	68	13.0	12	5.5	3.4	6.5	34	(
(d) **SEMICONDUCTORS GROUP COMPOSITE**	**7162.9**	**28**	**13755.7**	**26**	**937.0**	**118**	**1766.8**	**113**	**13.1**	**7.7**	**19.6**	**16**	**2**
Advanced Micro Devices	409.1	17	816.5	8	64.4	55	125.8	0	15.7	11.8	19.1	10	2
AMP	882.7	7	1720.7	5	75.7	5	148.3	4	8.6	8.7	15.1	22	2
Amphenol	154.8	34	301.7	30	6.9	53	10.5	45	4.4	3.9	7.7	36	(
Analog Devices (2)	162.9	14	314.2	15	10.2	161	18.3	525	6.2	2.7	7.6	35	(
Intel	2129.6	61	4153.1	62	568.5	167	1116.5	181	26.7	16.2	27.9	13	4
LSI Logic	177.1	17	346.0	14	13.1	NM	23.7	NM	7.4	NM	-32.3	NM	-1
Micron Technology (4)	214.9	64	391.3	51	29.5	NM	38.5	NM	13.7	1.3	7.8	39	1
National Semiconductor (7)	557.9	14	1049.4	17	46.2	68	73.1	74	8.3	5.6	13.5	17	(
Solectron (4)	242.0	155	429.4	128	8.7	171	15.3	130	3.6	3.4	21.1	30	1
Texas Instruments	2104.0	13	3988.0	12	111.0	54	196.0	75	5.3	3.9	16.6	21	3
VLSI Technology	128.0	23	245.3	17	3.0	NM	0.8	NM	2.3	NM	-15.1	NM	-0
10 **FOOD**													
INDUSTRY COMPOSITE	**67592.1**	**4**	**133285.8**	**4**	**1466.7**	**2**	**2332.9**	**-14**	**2.2**	**2.2**	**17.5**	**19**	**1**
(a) **FOOD DISTRIBUTION GROUP COMPOSITE**	**9980.6**	**19**	**19844.9**	**17**	**96.7**	**23**	**167.5**	**-6**	**1.0**	**0.9**	**11.1**	**16**	**1**
Fleming	2964.7	0	7009.5	2	26.8	1	64.2	-2	0.9	0.9	10.8	10	3
Nash Finch	631.3**	11	1232.3	12	5.0	5	7.5	6	0.8	0.8	10.7	12	1
Richfood Holdings (8)	370.8	9	610.0	3	4.9	-4	9.0	4	1.3	1.5	20.4	20	1
Rykoff-Sexton (8)	363.4	-4	723.5	-6	0.3	-88	-22.1	NM	0.1	0.7	-11.8	NM	-1
Smart & Final	197.4	12	371.8	11	4.6	10	7.0	13	2.3	2.3	15.0	23	0
Super Food Services (4)	265.1**	-26	527.6	-32	1.7	NM	3.5	NM	0.7	NM	6.2	14	0
Super Rite (10)	312.1	-1	640.6	4	2.3	28	-2.5	NM	0.7	0.6	-18.1	NM	-0
Supervalu (10)	4875.8	48	8729.5	48	51.1	12	101.0	8	1.0	1.4	15.0	15	2
(b) **FOOD PROCESSING GROUP COMPOSITE**	**27966.2**	**2**	**55203.2**	**3**	**1016.9**	**-14**	**2072.3**	**-14**	**3.6**	**4.3**	**19.1**	**20**	**1.**
American Maize-Products	135.8	-8	250.9	-8	-3.6	NM	-8.6	NM	NM	3.8	-2.0	NM	-0
Borden	1657.0	-6	3222.3	-7	27.7	-65	60.1	-56	1.7	4.5	-28.2	NM	-2.
Campbell Soup (5)	1632.1	6	3421.0	4	108.5	19	-7.4	NM	6.6	6.0	13.2	36	1.
ConAgra (7)	5378.3	-4	10438.7	0	103.1	-4	189.7	-1	1.9	1.9	17.2	15	1
CPC International	1689.8	1	3326.0	4	116.9	5	207.3	5	6.9	6.7	26.7	14	2.
Dean Foods (7)	592.2	-8	1158.8	-4	19.8	29	35.8	23	3.4	2.4	14.6	15	1.
Dole Food	863.7	-4	1630.1	-2	39.7	-1	92.9	39	4.6	4.4	8.8	23	1.
General Mills (7)	2007.4	0	4018.1	4	67.5	-35	208.4	-11	3.4	5.2	41.5	20	3.
Gerber Products (9)	282.9**	-10	593.0	-9	26.5	-19	69.5	-9	9.4	10.3	34.1	14	1.
Heinz (H. J.) (8)	2033.7	9	3800.4	9	69.7	-52	232.0	-11	3.4	7.8	22.4	18	2.
Hershey Foods	618.4	-1	1516.2	7	26.0	-25	131.1	40	4.2	5.5	19.4	14	3.
Hormel Foods (2)	676.7	1	1358.8	4	21.6	B	40.9	10	3.2	3.0	14.9	16	1.
Hudson Foods (3)	224.9	13	445.0	14	5.0	65	6.9	NM	2.2	1.5	7.8	13	0.
IBP	3042.9	8	5788.2	6	20.5	64	32.8	3	0.7	0.4	11.2	16	1.
International Multifoods (10)	555.8	2	1092.9	-1	6.4	6	16.9	11	1.2	1.1	12.9	10	2.
Interstate Bakeries (7)	275.4	-1	620.0	0	7.5	-5	12.7	-9	2.7	2.8	15.2	11	1.
Kellogg	1541.6	-3	3060.0	-1	142.7	-13	321.9	-9	9.3	10.3	34.5	18	2.
McCormick (1)	361.3	7	700.9	6	18.1	-5	35.9	-1	5.0	5.6	20.8	19	1.
Pilgrim's Pride (3)	220.6	7	448.3	10	3.6	NM	11.4	NM	1.6	NM	4.5	44	0.
Ralston Purina (3)	1874.4	1	3787.8	2	66.2	-13	152.6	-6	3.5	4.1	40.5	14	2.
Smithfield Foods (8)	309.2	32	648.6	18	0.5	-82	1.0	-92	0.2	1.3	2.1	NM	0.
Thorn Apple Valley (7)	161.0	3	326.6	5	0.9	-84	3.9	-55	0.5	3.5	16.2	B	2.
Tyson Foods (3)	1216.9	19	2387.3	16	53.7	21	99.8	23	4.4	4.3	14.7	15	1.
Universal Foods (3)	228.0	2	444.7	0	14.8	16	28.7	13	6.5	5.7	14.3	20	1.
Wrigley (Wm.) Jr.	386.2	14	718.5	11	53.6	20	95.9	17	13.9	13.2	31.2	24	1.
(c) **FOOD RETAILING GROUP COMPOSITE**	**29645.4**	**3**	**58237.8**	**1**	**353.1**	**93**	**93.1**	**-37**	**1.2**	**0.6**	**14.5**	**19**	**1.**
Albertson's (11)	2719.6	18	5407.1	20	74.1	125	179.8	58	2.7	1.4	26.7	22	2.
American Stores (11)	4668.1	-5	9518.4	-6	41.5	127	135.3	75	0.9	0.4	14.5	13	3.
Casey's General Stores (8)	162.2**	12	320.5	12	1.6	18	4.7	16	1.0	0.9	12.5	16	1.
Dairy Mart Convenience Stores (11)	142.0*	5	285.2	7	-0.3	NM	-5.9	NM	NM	0.0	-10.0	NM	-0.

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CORPORATE SCOREBOARD

MPANY	SALES				PROFITS				MARGINS				
	2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	2ND QUARTER 1993 %	2ND QUARTER 1992 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-23	12 MONTHS' EARNINGS PER SHARE
le Food Centers (11)	267.4	1	543.1	1	2.4	1	5.0	−2	0.9	0.9	11.8	8	0.75
d Lion	1749.9	6	3406.7	5	30.7	−42	52.6	49	1.8	3.2	13.0	23	0.27
darama Supermarkets (2)	169.0	−2	341.7	−2	0.3	−37	0.4	−50	0.2	0.3	0.9	56	0.27
eral Nutrition (11)	124.0	16	273.0	18	6.3	214	8.2	890	5.1	1.9	NA	NM	0.25
nt Food (10)	813.5	1	1925.9	−1	22.7	19	59.4	36	2.8	2.4	12.5	18	1.43
at Atlantic & Pacific Tea (10)	3279.3	−1	5654.8	−7	17.1	NM	−23.1	NM	0.5	NM	−1.5	NM	−0.39
naford Brothers	518.0**	1	1008.5	1	14.5	15	24.3	13	2.8	2.5	14.5	17	1.27
ger	5329.4	5	10503.3	4	29.6	554	59.1	132	0.6	0.1	NM	13	1.39
rsh Supermarkets (9)	284.8***	6	554.3	7	3.1	−13	4.3	−24	1.1	1.3	9.2	11	1.17
n Traffic (11)	762.0**	11	1510.0	9	0.3	NM	4.9	NM	0.0	NM	25.4	66	0.69
ldick (3)	424.4	6	842.1	7	8.8	9	16.8	9	2.1	2.0	12.2	15	1.37
eway	3549.4	3	6954.0	2	36.0	8	34.3	−39	1.0	1.0	31.1	26	0.65
way Food Town (4)	141.7	2	290.2	4	0.0	−95	1.3	27	0.0	0.4	5.6	13	0.90
ith's Food & Drug Centers	705.5	10	1393.8	6	14.0	3	28.0	5	2.0	2.1	10.5	13	1.82
p & Shop (11)	1061.3	5	1871.7	5	19.5	22	34.2	43	1.8	1.6	38.6	21	1.12
ermarkets General Holding (11)	1071.3	1	2205.1	−7	−4.7	NM	−601.9	NM	NM	NM	NM	NA	NA
age Super Market (5)	169.4	−5	344.5	−4	0.2	−54	1.4	NM	0.1	0.2	4.7	10	0.86
ns	1175.3	−9	2369.5	−7	17.7	3	33.6	4	1.5	1.3	15.8	11	1.91
is Markets	357.9	12	714.4	11	17.8	−3	36.4	−1	5.0	5.7	10.3	17	1.63
IEL													
USTRY COMPOSITE	**103935.5**	**0**	**203715.5**	**0**	**3810.1**	**68**	**7548.9**	**55**	**3.7**	**2.2**	**11.7**	**19**	**2.65**
AL													
OUP COMPOSITE	**689.6**	**6**	**1359.6**	**9**	**15.9**	**−19**	**25.6**	**−25**	**2.3**	**3.0**	**12.4**	**16**	**1.37**
land Coal	135.0	−7	273.2	7	1.7	−79	3.3	−79	1.3	5.6	8.4	20	1.24
ston	554.7**	10	1086.4	9	14.1	22	22.3	18	2.6	2.3	15.2	15	1.43
. & GAS													
OUP COMPOSITE	**99452.6**	**0**	**195053.1**	**0**	**3589.4**	**70**	**7156.0**	**58**	**3.6**	**2.1**	**11.7**	**18**	**2.85**
erada Hess	1402.8**	−5	2981.5	2	−145.1	NM	−141.7	NM	NM	0.3	−3.4	NM	−1.21
oco	7225.0**	−2	14168.0	3	487.0	NM	716.0	NM	6.7	NM	13.6	15	3.54
sland Oil (3)	2446.0**	−1	4674.3	3	50.1	101	51.0	342	2.0	1.0	−2.5	NM	−0.50
antic Richfield	4670.0*	3	9177.0	4	271.0	−12	531.0	9	5.8	6.8	18.2	15	7.63
lington Resources	312.2	25	628.7	21	133.6	331	178.8	194	42.8	12.4	12.5	20	2.35
evron	9854.0**	−7	18936.0	−7	50.0	−84	551.0	−16	0.5	3.0	15.0	14	6.30
astal	2631.9	10	5279.0	7	28.8	138	53.8	782	1.1	0.5	−4.1	NM	−0.80
mond Shamrock	656.9	1	1277.7	4	15.8	−33	20.1	58	2.4	3.6	7.7	18	1.16
on Oil & Gas	140.5	40	277.3	39	33.5	130	63.7	73	23.8	14.5	14.6	27	1.57
xon	27931.0**	1	55193.0	−1	1235.0	33	2420.0	7	4.4	3.4	14.4	16	3.95
lly (5)	161.7	31	311.6	33	4.7	106	6.7	NM	2.9	1.8	51.8	12	2.29
rr-McGee	845.8	−3	1629.3	−2	33.7	4	58.1	29	4.0	3.7	−1.0	NM	−0.27
isiana Land & Exploration	194.7**	1	381.6	2	5.6	17	8.3	NM	2.9	2.5	6.7	47	0.99
xus Energy	204.2	20	396.2	16	−3.9	NM	−3.7	NM	NM	NM	44.6	12	0.67
chell Energy & Development (11)	230.8	24	481.7	9	10.3	NM	29.7	554	4.5	NM	8.7	21	1.17
bil	16188.0**	7	31197.0	3	579.0	127	1069.0	180	3.6	1.7	11.6	15	4.85
rphy Oil	430.3**	−2	828.8	3	22.7	−17	46.5	76	5.3	6.3	6.8	22	1.85
cidental Petroleum	2011.0	−1	4180.0	3	75.0	29	158.0	NM	3.7	2.9	7.4	25	0.85
nnzoil	685.2**	16	1335.7	18	34.2	345	55.8	NM	5.0	1.3	6.6	32	1.91
illips Petroleum	3280.0**	6	6363.0	9	123.0	23	184.0	776	3.8	3.2	16.0	17	1.68
aker State	195.1	3	374.9	3	4.4	9	7.8	51	2.2	2.1	6.3	30	0.45
n	2439.0**	−6	4743.0	−6	70.0	NM	105.0	NM	2.9	0.0	−9.7	NM	−1.74
xaco	9065.0**	−4	17584.0	−2	309.0	105	587.0	53	3.4	1.6	12.5	14	4.30
ramar	582.6	−10	1241.6	−3	15.3	20	40.1	47	2.6	2.0	10.5	15	1.46
ion Texas Petroleum Holdings	147.0	2	322.6	−1	13.0	−44	38.7	−46	8.8	15.9	22.3	31	0.74
ocal	2098.0**	−22	4416.0	−13	88.0	33	229.0	179	4.2	2.5	11.9	22	1.28
X-Marathon Group	3103.0*	−4	6057.0	−2	21.0	−88	52.0	−75	0.7	5.6	−1.6	NM	−0.18
lero Energy	321.0	1	616.8	4	24.7	−10	40.3	−15	7.7	8.6	9.0	14	1.75
TROLEUM SERVICES													
OUP COMPOSITE	**3793.2**	**10**	**7302.8**	**8**	**204.8**	**43**	**367.3**	**18**	**5.4**	**4.2**	**10.4**	**31**	**1.20**
ker Hughes (3)	670.4	4	1362.9	8	23.8	NM	26.6	NM	3.6	NM	2.7	85	0.31
roid	207.1	9	382.9	7	7.1	20	11.7	22	3.4	3.2	7.6	27	0.27
esser Industries (2)	1067.2	14	1990.9	9	2.7	−80	22.2	−7	0.3	1.5	7.5	49	0.50
hlumberger	1719.3	11	3316.9	7	163.0	−9	296.1	−12	9.5	11.5	14.8	25	2.58
lewater (9)	129.2	17	249.3	11	8.2	24	10.7	NM	6.3	6.0	5.4	37	0.55
EALTH CARE													
DUSTRY COMPOSITE	**51948.5**	**7**	**103210.6**	**7**	**4348.7**	**1**	**9539.4**	**7**	**8.4**	**8.9**	**24.2**	**17**	**2.04**
UG DISTRIBUTION													
OUP COMPOSITE	**14362.8**	**12**	**28844.6**	**13**	**235.0**	**NM**	**500.2**	**677**	**1.6**	**NM**	**13.6**	**16**	**1.45**
bor Drugs (5)	133.6	10	274.0	12	3.9	16	9.1	8	2.9	2.8	13.5	16	1.04
rgen Brunswig (4)	1764.6**	32	3466.9	36	14.5	−10	29.8	−5	0.8	1.2	13.1	11	1.56
g B (11)	150.8	10	297.7	7	3.3	26	7.7	30	2.2	1.9	11.6	16	1.27
ndley Western Industries	809.1	18	1607.6	21	3.2	−15	6.5	−6	0.4	0.6	6.2	13	0.91

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CORPORATE SCOREBOARD

COMPANY	SALES 2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	PROFITS 2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	MARGINS 2ND QUARTER 1993 %	MARGINS 2ND QUARTER 1992 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-23	MO EAR SH
Cardinal Distribution (9)	550.0	16	1048.9	10	7.8	26	18.4	25	1.4	1.3	13.8	15	1
Drug Emporium (10)	184.0	−2	390.3	−1	0.2	NM	1.0	NM	0.1	NM	−3.6	NM	−0.
Eckerd (Jack) (11)	1004.4	8	2042.7	6	16.8	338	32.8	24	1.7	0.4	NM	NA	
Fay's (11)	216.7	2	474.8	5	−1.1	NM	4.1	−32	NM	0.7	9.9	15	0
FoxMeyer (9)	1209.9	29	2460.8	38	2.7	−57	8.3	−51	0.2	0.7	−0.8	NM	−0
Genovese Drug Stores (11)	142.6	3	261.0	3	1.5	18	4.8	22	1.0	0.9	14.3	12	0
Hook-SupeRx (4)	571.1	6	1176.4	7	3.9	−19	14.1	3	0.7	0.9	16.3	10	0
Longs Drug Stores (11)	608.0	1	1274.7	2	10.9	−20	27.4	−6	1.8	2.3	10.8	14	2
McKesson (9)	2969.4**	5	5921.2	6	55.3	101	89.1	NM	1.9	1.0	28.5	13	3
Perry Drug Stores (2)	168.1	3	348.8	3	1.6	5	2.2	−47	1.0	1.0	8.9	13	0
Revco D. S. (7)	731.5	11	1283.9	8	12.0	NM	16.2	NM	1.6	NM	3.2	33	0
Rite Aid (10)	1063.8	8	2171.9	9	34.2	3	79.9	3	3.2	3.4	12.6	12	1
Walgreen (4)	2085.3	11	4343.2	11	64.4	14	148.6	11	3.1	3.0	18.2	19	1
(b) **DRUGS & RESEARCH**													
GROUP COMPOSITE	**17472.8**	**5**	**34518.5**	**5**	**2459.8**	**−17**	**5696.7**	**−3**	**14.1**	**17.8**	**28.9**	**17**	**2.**
Allergan	218.8	−1	431.8	0	24.6	8	48.3	13	11.2	10.3	21.2	14	1
American Home Products	1909.4	9	4020.4	7	287.5	9	689.0	69	15.1	15.0	41.4	13	4
Amgen	343.1	31	653.4	36	100.2	40	180.8	34	29.2	27.4	39.1	13	2
Bristol-Myers Squibb	2802.4	2	5557.9	3	520.6	10	1095.3	9	18.6	17.3	26.5	18	3
Carter-Wallace (9)	162.8**	4	332.1	1	5.8	−64	13.7	−44	3.6	10.2	8.6	38	0
Genentech	169.8**	25	322.8	22	10.4	206	24.7	257	6.1	2.5	3.6	NM	0
IVAX	143.9	49	271.9	36	17.9	248	34.3	251	12.4	5.3	20.5	24	1.
Lilly (Eli)	1561.0	6	3121.0	3	346.8	2	720.3	−8	22.2	23.0	14.6	19	2
Marion Merrell Dow	750.0	−17	1367.0	−19	29.0	−85	103.0	−72	3.9	21.7	22.3	11	1.
Merck	2573.7	8	4953.3	8	172.5	−73	786.3	−35	6.7	27.1	39.3	18	1.
Pfizer	1748.7	3	3616.0	5	253.8	15	582.8	13	14.5	13.0	26.0	19	3
Rhone-Poulenc Rorer	1008.1	4	1924.4	3	121.6	36	218.0	35	12.1	9.2	35.5	14	3.
Schering-Plough	1123.4	10	2213.0	8	213.2	15	436.7	16	19.0	18.1	57.0	17	3.
Syntex (5)	584.3	12	1089.8	4	40.8	−68	159.9	−35	7.0	24.2	21.9	17	1.
Upjohn	923.8	4	1862.4	5	125.3	1	277.7	6	13.6	13.9	26.7	9	3.
Warner-Lambert	1449.7	6	2781.4	4	189.9	7	326.0	−5	13.1	13.0	38.7	13	4.
(c) **HEALTH-CARE SERVICES**													
GROUP COMPOSITE	**9525.0**	**6**	**18930.3**	**6**	**491.6**	**15**	**1036.2**	**23**	**5.2**	**4.7**	**11.3**	**25**	**0.**
American Medical Holdings (4)	565.5	0	1131.6	0	21.7	−76	40.0	−60	3.8	16.2	8.2	17	0.
Beverly Enterprises	714.4	14	1405.7	14	14.5	24	24.9	33	2.0	1.9	1.8	NM	0.
Caremark International	439.5	22	867.3	23	18.6	121	34.3	47	4.2	2.3	10.9	29	0.
Foundation Health (6)	451.4	18	834.5	19	18.9	27	37.6	31	4.2	3.9	22.4	17	2.
Galen Health Care (4)	992.0	−3	1993.0	−4	73.0	−6	141.0	−11	7.4	7.6	12.4	20	1.
HCA-Hospital Corp. of American	1274.8	−1	2599.3	−1	96.5	13	210.9	30	7.6	6.6	5.0	54	0.
Health Care & Retirement	139.2	14	271.4	13	8.7	30	16.4	34	6.3	5.5	10.4	20	0.
Healthtrust (4)	596.7	5	1194.6	5	37.4	35	75.3	52	6.3	4.9	20.7	13	1.
Hillhaven (7)	315.5	7	630.6	8	11.4	118	20.8	150	3.6	1.8	22.4	10	0.
Humana	778.0**	8	1564.0	10	19.0	NM	37.0	NM	2.4	NM	−18.9	NM	−0.
Lifetime	233.0	5	463.2	7	3.3	NM	8.2	NM	1.4	NM	10.8	21	1.
Manor Care (7)	265.6	10	510.6	10	17.3	−50	29.1	−34	6.5	14.3	18.0	18	1.
National Health Laboratories	197.0	9	396.8	11	33.2	6	66.8	9	16.9	17.3	21.8	33	0.
National Medical Enterprises (7)	956.5	−4	1889.7	−4	2.8	NM	56.9	NM	0.3	NM	9.0	12	0.
OrNda HealthCorp (4)	163.7**	30	312.9	25	4.1	NM	6.5	NM	2.5	NM	−55.8	NM	−3.
U. S. Healthcare	650.2**	22	1290.9	22	67.2	43	130.2	41	10.3	8.8	42.7	23	2.
Universal Health Services	187.5**	7	382.8	2	6.5	6	15.1	11	3.5	3.5	10.2	11	1.
WellPoint Health Network	604.6**	6	1191.5	7	37.6	−21	85.1	−6	6.2	8.4	16.1	18	1.
(d) **MEDICAL PRODUCTS**													
GROUP COMPOSITE	**10587.9**	**5**	**20917.3**	**6**	**1162.3**	**8**	**2306.3**	**9**	**11.0**	**10.7**	**25.2**	**16**	**2.**
Abbott Laboratories	2073.8	9	4119.4	9	346.1	9	691.6	13	16.7	16.6	38.4	16	1.
Bard (C. R.)	243.9	0	480.3	0	20.3	13	47.2	36	8.3	7.3	22.7	15	1.
Bausch & Lomb	479.4	7	887.0	8	47.0	15	79.9	15	9.8	9.2	20.7	16	3.
Baxter International	2215.0	7	4256.0	5	132.0	2	189.0	−21	6.0	6.2	13.6	15	1.
Becton, Dickinson (3)	625.4	6	1237.9	5	58.2	5	117.2	9	9.3	9.4	13.7	14	2.
Dentsply International (9)	131.8	5	271.3	15	−4.2	NM	3.4	−76	NM	6.0	NA	53	0.
Johnson & Johnson	3541.0	4	7101.0	5	495.0	10	998.0	10	14.0	13.2	31.0	15	2.
Kendall International	209.3	8	411.5	8	13.6	NM	23.6	NM	6.5	NM	NA	NA	
Medtronic (8)	358.3	7	666.5	5	58.0	22	105.8	22	16.2	14.2	23.3	17	3.
Owens & Minor	341.2	18	656.0	15	4.3	18	8.1	21	1.3	1.2	13.8	23	0.
Stryker	140.0	20	275.2	20	14.0	27	28.5	29	10.0	9.4	21.8	23	1.
U. S. Surgical	228.8	−25	555.1	−5	−22.0	NM	14.0	−78	NM	11.4	14.3	16	1.
13 **HOUSING & REAL ESTATE**													
INDUSTRY COMPOSITE	**7657.3**	**8**	**14091.4**	**8**	**422.3**	**24**	**585.1**	**36**	**5.5**	**4.8**	**12.7**	**21**	**1.**
(a) **BUILDING MATERIALS**													
GROUP COMPOSITE	**5584.5**	**2**	**10236.2**	**2**	**344.9**	**16**	**424.3**	**23**	**6.2**	**5.4**	**14.1**	**23**	**1.**
Dexter	228.6	−10	445.8	−10	9.8	−15	17.5	−15	4.3	4.6	11.4	15	1.
Lafarge	394.4	−5	586.2	−6	22.2	33	−50.6	NM	5.6	4.0	−3.9	NM	−0.
Owens-Corning Fiberglas	754.0	3	1405.0	3	33.0	50	24.0	−14	4.4	3.0	NM	26	1.
PPG Industries	1523.6	1	2970.3	0	106.2	0	216.3	17	7.0	7.1	14.1	21	3.

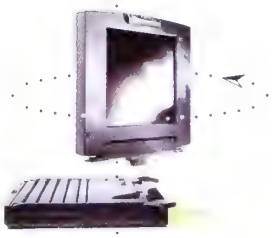
Footnotes on page 51

It sits, lies down, and does back flips.

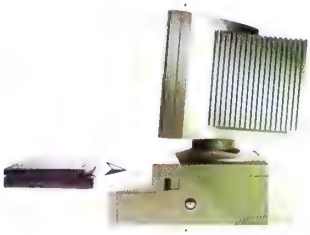
Good

The most flexible screen ever seen

It opens flat up to 180°



Or flips around in just seconds

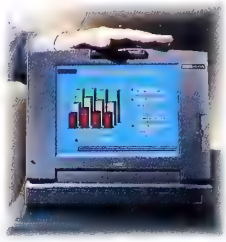


There's even a [illegible] desktop computing

by-

The UltraLite® Versa™ notebook gives new meaning to the term "faithful companion."

Versa functions as a pen based tablet to enter notes or data



The reversible screen makes presentations a snap

The UltraLite Versa is truly a breed apart. It's versatile and adapts easily to meet your changing needs, whatever and wherever. For example, switch from a mono to color screen, or put in more hard-drive memory. And despite its heavy-duty technology, the Versa weighs as little as 6 pounds.

Then there's the most sophisticated and flexible display on the market. Use it as a basic notebook, flip it around for presentations, or use it as a pen-based tablet. Plus, Versa's screen provides sharp contrast and brilliant graphics, monochrome or color.

With up to 10 hours of battery life, the one thing it won't do is play dead.

Yes, the Versa notebook knows a lot of tricks. Its i486™SL processor is fast and powerful, yet conserves power. Simply swap the floppy drive for an extra battery, doubling battery life.

And what's a notebook computer if you can't take it for long walks? Advanced PCMCIA communications capability means you can easily send and receive faxes and retrieve data.

We'll even come when we're called.

In addition to a standard 3-year limited warranty, you get UltraCare℠, an enhanced, full-service program providing fast response and support anytime, anywhere, at home or overseas.*

Begging for more? Call 1-800-NEC-VERSA or for info via fax, NEC FastFacts™ at 1-800-366-0476, request document 8583772.

Because ⬆ is the way you want to go.

NEC

Communications Features

Using thin, credit-card-sized cards, you can send and receive faxes, talk to your network, or ensure secure data storage. And for advanced, real-time mobile communications, Versa is even ready for wireless and cellular connectivity and also incorporates the newest PCMCIA technology.

- Accommodates two Type II cards or one Type III card
- Simultaneous card capability data/fax modem, LAN, storage
- QuickSwap™ compatibility, for features such as changing cards without powering down

The UltraLite Versa is the first of a new series of computer products from NEC designed to work together with enhanced functionality and advanced ergonomics

With the UltraLite Versa you can choose your own best friend.

Features/Options

Versa's many standard and optional features provide exceptional upgradability and flexibility, to give you the power to choose the system you need today and then enhance its features as your needs change.

Battery

- DoubleTime™ technology, for increased battery power
- Long-life NiMH battery pack: 2.5 to 5 hours (color) and 4 to 6 hours (mono)
- Optional secondary battery: for a total of 5 to 10 hours (color) and 8 to 12 hours (mono)

Storage and memory

- Choice of 120MB, 180MB, or 250MB easily removable hard drives, no tools required
- Slide-in memory cards, for upgradability from 4MB all the way to 20MB**

Processor

- i486SL processor, 25MHz or 33MHz
- Built in numeric coprocessor and 8KB cache

Screen

- High-speed local bus video and desktop-level 640 X 480 display
- NEC-upgradable to pen capability** mono or color
- Standard 9.4" STN sidelit Super VGA monochrome screen, with 64 shades of gray
- Optional 9.45" TFT active-matrix Super VGA color screen, with wide-angle viewing and 256-color display out of a possible 226,000

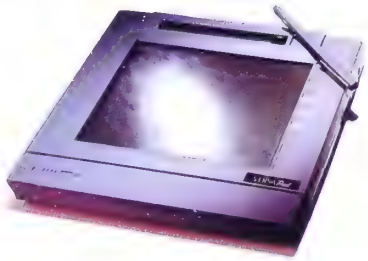
Docking Station

- 2 full-sized ISA slots, for expandability
- 3 drive bays: 2 external 5.25" and 1 internal 3.5"
- Integrated microphone and headphone ports

Pointing Device

- Custom Ballpoint™ mouse standard

VersaPad



NEC's new VersaPad™, the ideal platform for corporate pen computing. Perfect for data collection and transmission needs, including inventory control, sales force automation and merchandising.

- Full-function i486SL portable tablet computer
- Slim 4-pound design with VGA transflective screen for clear indoor/outdoor viewing
- 2 PCMCIA Type II slots, for flexible communications and storage
- NiMH battery options and advanced power management, for long battery life
- Available with all major pen computing environments, including Windows for Pen Computing™ and PenPoint™ software

intel inside

NEC

CORPORATE SCOREBOARD

MPANY	SALES 2ND QUARTER 1993 $ MIL.	CHANGE FROM 1992 %	6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	PROFITS 2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	6 MONTHS 1993 $ MIL.	CHANGE FROM 1992 %	MARGINS 2ND QUARTER 1993 %	MARGINS 2ND QUARTER 1992 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-23	12 MONTHS' EARNINGS PER SHARE
M (7)	167.5	7	306.0	8	12.0	21	16.7	18	7.1	6.3	17.0	21	0.83
erwin-Williams	824.2	7	1442.5	6	60.6	13	74.4	14	7.4	6.9	16.8	19	1.72
uthdown	144.4**	6	250.5	3	2.6	NM	−1.8	NM	1.8	NM	−17.4	NM	−2.00
umseh Products	368.6	2	710.2	2	24.3	19	42.2	22	6.6	5.7	9.2	14	2.73
cas Industries (7)	163.1**	9	305.4	7	6.2	NM	1.7	NM	3.8	NM	0.4	NM	0.11
lspar (2)	179.0	1	316.2	2	10.2	11	13.6	6	5.7	5.2	20.3	22	1.62
lcan Materials	305.9	8	520.1	5	31.6	5	31.1	−11	10.3	10.6	12.7	19	2.32
k International	531.2	3	978.0	2	26.2	10	39.2	14	4.9	4.6	17.8	17	1.96
NSTRUCTION & REAL ESTATE													
OUP COMPOSITE	**2072.8**	**28**	**3855.2**	**28**	**77.4**	**71**	**160.8**	**89**	**3.7**	**2.8**	**9.1**	**17**	**1.44**
ostead Mortgage	159.2**	29	318.4	41	23.3	85	46.2	94	14.6	10.1	17.2	11	3.52
ntex (9)	698.2**	25	1349.2	25	17.0	70	32.3	67	2.4	1.8	11.8	16	2.11
est City Enterprises (11)	129.9**	18	266.8	13	1.3	NM	21.6	NM	1.0	NM	11.5	20	1.85
ufman & Broad Home (1)	320.0	36	544.9	30	9.1	129	13.5	83	2.8	1.7	7.9	21	0.91
nar (1)	142.0**	50	259.4	45	10.7	40	19.7	25	7.5	8.1	10.1	19	1.54
D.C. Holdings	161.2**	23	278.4	19	3.0	101	3.9	11	1.9	1.1	3.1	29	0.24
yline (7)	138.0	31	248.4	39	3.2	9	4.6	58	2.3	2.8	6.4	19	0.92
S. Home	195.7**	11	362.8	14	5.3	−6	10.3	20	2.7	3.2	−33.3	NA	NA
bb (Del) (6)	128.6**	58	226.8	56	4.6	25	8.7	24	3.6	4.5	8.5	15	1.05
ISURE TIME INDUSTRIES													
USTRY COMPOSITE	**18862.3**	**6**	**36156.3**	**6**	**1243.0**	**2**	**2097.9**	**6**	**6.6**	**6.9**	**14.7**	**22**	**1.67**
TING PLACES													
OUP COMPOSITE	**2852.4**	**5**	**5502.6**	**5**	**335.4**	**13**	**584.7**	**12**	**11.8**	**11.0**	**17.5**	**20**	**2.00**
b Evans Farms (8)	160.5	13	330.1	17	10.2	3	21.6	7	6.4	7.0	14.3	18	1.03
cker Barrel Old Country Store (5)	125.2	25	244.7	29	10.1	28	17.7	37	8.0	7.9	12.1	37	0.72
rcher (Carl) Enterprises (11)	139.9	−13	245.7	−12	0.9	−71	−9.8	NM	0.7	2.0	−6.3	NM	−0.30
Donald's	1877.8	6	3531.9	4	288.8	14	507.1	15	15.4	14.3	18.0	18	2.75
rrison Restaurants (7)	286.3**	4	569.9	6	10.3	15	20.8	15	3.6	3.2	16.9	20	1.50
oney's (2)	262.8**	2	580.4	5	15.1	9	27.2	19	5.8	5.4	NM	NM	−0.52
TERTAINMENT													
OUP COMPOSITE	**3347.3**	**9**	**6708.5**	**11**	**296.7**	**6**	**564.7**	**16**	**8.9**	**9.1**	**13.2**	**24**	**1.58**
ckbuster Entertainment	456.1	72	847.2	63	47.7	59	86.9	56	10.5	11.3	20.5	28	0.88
ney (Walt) (3)	1936.8	3	3963.2	13	259.1	17	488.8	27	13.4	11.7	17.9	22	1.78
ramount Communications (2)	954.4	3	1898.1	−5	−10.1	NM	−10.9	NM	NM	3.1	5.4	29	1.79
TEL & MOTEL													
OUP COMPOSITE	**3612.5**	**8**	**7086.0**	**7**	**157.3**	**30**	**268.9**	**24**	**4.4**	**3.6**	**12.9**	**28**	**1.28**
tar	130.8	−1	253.1	2	3.9	−35	5.5	−21	3.0	4.6	4.2	21	0.38
esars World (5)	224.4	13	488.9	8	17.0	77	42.6	30	7.6	4.8	16.8	13	3.07
cus Circus Enterprises (11)	209.8	2	400.9	2	32.8	11	52.8	9	15.6	14.3	23.9	24	1.44
ton Hotels	345.2**	17	676.8	19	26.8	−17	49.9	−9	7.8	11.0	9.7	21	2.07
rriott	2155.0	6	4235.0	6	36.0	24	55.0	38	1.7	1.4	12.8	36	0.78
rage Resorts	231.1	20	445.9	9	18.0	NM	28.4	108	7.8	NM	9.1	25	1.70
mus	316.2	12	585.5	9	22.8	56	34.8	73	7.2	5.2	15.0	55	0.98
HER LEISURE													
OUP COMPOSITE	**9050.0**	**4**	**16859.1**	**4**	**453.6**	**−14**	**679.6**	**−10**	**5.0**	**6.0**	**15.2**	**21**	**1.74**
nerican Greetings (10)	392.0	5	835.3	6	29.0	14	63.0	20	7.4	6.9	12.0	18	3.18
unswick	589.0	8	1131.8	4	22.5	25	32.3	10	3.8	3.3	5.2	32	0.44
rnival Cruise Lines (1)	378.2	9	701.9	4	65.1	14	115.8	12	17.2	16.5	20.7	19	2.09
stman Kodak	4265.0	−1	7807.0	0	304.0	9	398.0	12	7.1	6.5	20.7	19	2.72
her-Price	157.4	3	284.8	−5	6.2	−28	5.2	−57	3.9	5.6	15.0	21	1.09
etwood Enterprises (8)	553.1	21	998.1	25	15.7	23	26.5	39	2.8	2.8	11.3	16	1.23
rley-Davidson	334.4	22	604.0	16	23.8	34	38.9	47	7.1	6.5	20.7	22	1.80
sbro	515.6	6	1002.6	7	27.2	20	53.7	17	5.3	4.7	16.4	17	2.08
ffy	220.1	22	435.1	21	6.9	45	11.8	12	3.1	2.6	10.8	16	1.04
ttel	411.2	2	757.4	4	34.0	45	52.3	37	8.3	5.8	27.6	16	1.58
sicland Stores	222.2	10	445.9	16	−1.7	NM	−3.5	NM	NM	NM	11.7	16	0.85
tboard Marine (3)	295.4	1	569.9	2	−104.1	NM	−103.1	NM	NM	5.1	−27.6	NM	−6.07
laroid	569.9	2	1038.4	5	28.6	−19	5.1	−88	5.0	6.4	9.2	28	1.33
co Toys	146.7	0	247.0	−12	−3.5	NM	−16.5	NM	NM	5.2	−2.6	NM	−0.25
ANUFACTURING													
USTRY COMPOSITE	**25529.8**	**5**	**49318.9**	**5**	**1275.3**	**31**	**2239.6**	**47**	**5.0**	**4.0**	**12.9**	**26**	**1.63**
NERAL MANUFACTURING													
OUP COMPOSITE	**9120.4**	**4**	**18014.4**	**3**	**713.9**	**14**	**1344.8**	**12**	**7.8**	**7.1**	**17.3**	**22**	**2.15**
iant Techsystems (9)	168.5	−7	465.8	−31	8.4	42	17.2	−2	5.0	3.3	−65.1	NM	−4.50
ery Dennison	662.2	−1	1328.7	−1	22.8	2	45.0	6	3.4	3.3	10.4	21	1.40
rnes Group	127.5	−7	254.5	−6	2.9	NM	3.2	−1	2.3	NM	6.3	34	0.94
:	124.4	7	225.6	10	13.5	12	22.6	13	10.9	10.4	20.9	16	1.82
rlisle	160.8	13	299.2	9	7.5	15	13.4	13	4.7	4.6	12.4	18	1.68
rning	912.8**	4	1736.2	6	89.8	34	139.6	6	9.8	7.6	14.6	23	1.44
ane	337.7	0	650.0	0	15.7	NM	26.5	NM	4.7	NM	18.4	17	1.69
deral Signal	146.5	11	273.9	9	10.6	14	17.8	14	7.2	7.1	20.5	23	1.06

Footnotes on page 51

CORPORATE SCOREBOARD

COMPANY	SALES 2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	SALES 6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	PROFITS 2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	PROFITS 6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	MARGINS 2ND QUARTER 1993 %	MARGINS 2ND QUARTER 1992 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-23	M EA SC
Hillenbrand Industries (1)	400.7	14	775.2	11	37.4	28	70.9	27	9.3	8.3	20.3	26	8
Illinois Tool Works	829.3	16	1579.3	14	54.8	7	96.8	6	6.6	7.1	17.3	21	
International Game Technology (3)	141.2	15	247.8	25	30.0	50	48.7	57	21.3	16.2	35.5	39	
Mark IV Industries (10)	287.9	6	593.1	6	13.6	32	23.2	33	4.7	3.8	15.1	17	
Minnesota Mining & Mfg.	3540.0	1	7057.0	1	331.0	4	661.0	6	9.4	9.0	19.0	19	
Newell	372.7	17	706.9	13	34.5	−2	62.2	−1	9.3	11.1	18.6	15	
Rubbermaid	488.5	9	972.1	8	50.6	16	100.2	43	10.4	9.7	18.9	24	
Trinova	419.7	−4	848.9	−1	−9.1	NM	−3.5	NM	NM	1.4	1.6	NM	
(b) **MACHINE & HAND TOOLS GROUP COMPOSITE**	**3170.1**	**5**	**6195.1**	**6**	**113.1**	**24**	**202.4**	**33**	**3.6**	**3.0**	**6.8**	**33**	
Black & Decker	1155.9	2	2255.8	3	19.5	61	33.3	75	1.7	1.1	−7.8	NM	
Blount (10)	178.3	14	337.3	1	1.2	175	2.4	NM	0.7	0.3	5.2	21	
Cincinnati Milacron	237.2	28	458.2	33	5.8	108	10.1	160	2.5	1.5	27.6	29	
Danaher	258.9**	9	507.3	13	12.8	59	22.9	73	4.9	3.4	12.8	23	
Giddings & Lewis	135.8	−9	276.1	−5	11.5	37	21.7	38	8.5	5.6	10.3	16	
Kennametal (6)	155.3	3	309.0	2	7.7	186	15.0	86	4.9	1.8	8.0	18	
Snap-on Tools	272.7**	17	543.4	18	22.4	14	40.9	7	8.2	8.4	10.2	25	
SPX	210.8	−3	389.4	−1	5.3	−35	6.1	−40	2.5	3.7	9.3	13	
Stanley Works	565.2	2	1118.6	6	27.0	−6	50.0	8	4.8	5.2	14.7	18	
(c) **SPECIAL MACHINERY GROUP COMPOSITE**	**10561.4**	**4**	**20099.5**	**5**	**334.7**	**100**	**505.4**	**1541**	**3.2**	**1.7**	**7.8**	**41**	
Applied Materials (2)	255.7	42	471.3	36	22.3	138	37.0	135	8.7	5.2	11.9	39	
Caterpillar	2905.0	12	5602.0	17	67.0	NM	101.0	NM	2.3	NM	6.2	78	
Clark Equipment	233.4	10	433.1	8	10.8	NM	13.4	NM	4.6	NM	−0.9	NM	
Deere (2)	2105.4**	13	3528.9	7	30.2	−31	2.6	−89	1.4	2.4	0.6	NM	
Dover	594.5	4	1161.3	4	39.8	27	73.5	20	6.7	5.5	17.1	19	
FMC	992.1**	−8	1897.6	−6	62.6	−3	108.0	−9	6.3	6.0	71.6	10	
General Signal	371.3	−12	734.4	−12	19.3	21	36.7	19	5.2	3.8	3.3	NM	
Goulds Pumps	152.4	3	276.8	−2	8.2	8	11.6	−21	5.4	5.2	10.1	26	
Harnischfeger Industries (2)	323.1**	−13	607.1	−13	3.7	−73	4.2	−83	1.1	3.7	6.8	16	
Indresco (2)	132.9	−3	255.0	−5	3.6	NM	−0.9	NM	2.7	NM	−15.1	NM	
Ingersoll-Rand	1006.8	9	1958.9	10	36.0	10	60.6	14	3.6	3.5	9.5	28	
Interlake	173.2	1	341.6	−1	−3.1	NM	−6.7	NM	NM	NM	NM	NM	
Joy Technologies (10)	130.2	−7	286.8	−5	1.5	−73	−2.5	NM	1.1	3.8	−28.8	NM	
Pentair	320.3	8	642.1	9	9.8	24	19.3	18	3.1	2.7	11.7	16	
Stewart & Stevenson Services (11)	220.2	21	442.5	20	12.1	36	25.2	33	5.5	4.9	14.9	32	
Varity (11)	645.0	−22	1459.9	−15	11.0	NM	22.2	NM	1.7	NM	14.1	32	
(d) **TEXTILES GROUP COMPOSITE**	**2677.9**	**12**	**5009.9**	**11**	**113.6**	**26**	**186.9**	**32**	**4.2**	**3.8**	**14.9**	**18**	
Albany International	149.6**	7	286.7	3	4.6	NM	4.7	NM	3.1	NM	4.4	59	
Amoskeag	264.6**	1	475.9	−1	1.3	−19	2.0	80	0.5	0.6	6.7	19	
Cone Mills	202.5	11	397.6	11	13.7	26	26.3	15	6.8	5.9	33.7	10	
Fieldcrest Cannon	256.5	0	460.5	−2	4.1	−2	6.8	65	1.6	1.6	9.3	14	
Interface	150.0	1	285.1	−6	2.8	−18	5.0	−30	1.9	2.3	5.3	18	
Mohawk Industries	156.9	101	297.4	109	6.0	94	8.1	164	3.8	4.0	12.6	26	
Shaw Industries (6)	669.3	34	1188.6	32	37.7	61	54.3	68	5.6	4.7	15.9	26	
Springs Industries	483.9	0	985.6	4	9.0	−20	18.1	9	1.9	2.3	8.9	15	
Unifi (6)	344.4	4	632.5	3	34.5	5	61.6	12	10.0	9.9	28.9	13	
16 **METALS & MINING INDUSTRY COMPOSITE**	**14698.5**	**5**	**28169.8**	**5**	**−153.5**	**NM**	**−184.8**	**NM**	**NM**	**NM**	**−6.1**	**NM**	
(a) **ALUMINUM GROUP COMPOSITE**	**4643.3**	**−4**	**8830.8**	**−4**	**−67.6**	**NM**	**−102.5**	**NM**	**NM**	**NM**	**−5.6**	**NM**	
Aluminum Co. of America	2405.3	0	4514.9	−3	35.3	NM	62.9	10	1.5	0.1	0.7	NM	
Amax	882.0	−4	1729.2	−4	−80.1	NM	−109.9	NM	NM	NM	−12.4	NM	
Reynolds Metals	1356.0	−9	2586.7	−7	−22.8	NM	−55.5	NM	NM	1.7	−10.0	NM	
(b) **STEEL GROUP COMPOSITE**	**7799.5**	**15**	**14857.7**	**14**	**−240.9**	**NM**	**−322.7**	**NM**	**NM**	**NM**	**−29.1**	**NM**	
Allegheny Ludlum	279.5	7	569.5	8	18.6	61	36.9	61	6.7	4.4	22.6	21	
Armco	562.8	3	1078.3	18	8.7	248	−13.3	NM	1.5	0.5	NM	NM	
Bethlehem Steel	1117.4	10	2137.8	6	−5.3	NM	−46.6	NM	NM	NM	−33.4	NM	
Carpenter Technology (6)	158.5	8	313.8	1	11.8	NM	19.7	206	7.4	NM	8.6	17	
Commercial Metals (4)	438.4**	51	851.8	53	6.5	134	11.3	253	1.5	1.0	9.1	18	
Inland Steel Industries	996.4	10	1937.9	7	−2.5	NM	−33.9	NM	NM	NM	−62.9	NM	
Lukens	226.9	21	448.0	56	8.0	21	14.2	32	3.5	3.5	11.1	22	
National Steel	622.7	0	1210.1	2	−17.4	NM	−71.1	NM	NM	0.7	−41.5	NA	
Northwestern Steel & Wire (5)	141.9	16	257.8	15	1.6	330	1.5	NM	1.1	0.3	−14.1	NM	
Nucor	564.9	45	1054.7	36	30.4	75	52.2	55	5.4	4.5	12.2	38	
Oregon Steel Mills	204.1	63	353.2	40	9.2	−12	16.0	−25	4.5	8.4	5.3	27	
Quanex (2)	161.4	9	302.8	11	1.9	−40	2.4	−35	1.2	2.1	−0.5	NM	
USX–U. S. Steel Group	1427.0	13	2635.0	8	−333.0	NM	−320.0	NM	NM	0.2	NM	NM	
Weirton Steel	301.3	13	599.1	12	−11.4	NM	−36.9	NM	NM	NM	−24.8	NM	
Wheeling-Pittsburgh	269.0	14	504.7	6	9.2	NM	6.4	NM	3.4	NM	−7.8	NM	
Worthington Industries (7)	327.2	18	603.3	18	22.8	32	38.5	33	7.0	6.2	16.0	26	

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CORPORATE SCOREBOARD

IPANY	SALES 2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	SALES 6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	PROFITS 2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	PROFITS 6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	MARGINS 2ND QUARTER 1993 %	MARGINS 2ND QUARTER 1992 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-23	12 MONTHS' EARNINGS PER SHARE
R METALS													
IP COMPOSITE	**2255.7**	**-7**	**4481.3**	**-2**	**154.9**	**NM**	**240.4**	**458**	**6.9**	**NM**	**8.4**	**32**	**1.00**
co	416.6	-15	875.6	-8	-24.1	NM	-55.0	NM	NM	0.9	-7.2	NM	-2.30
us Minerals	453.6	12	828.3	3	82.0	NM	93.6	NM	18.1	NM	15.5	8	3.22
port-McMoRan Copper & Gold	130.9	-46	264.4	-24	-26.9	NM	-18.8	NM	NM	20.6	6.9	NM	0.15
ma Copper	190.2	-7	384.8	-5	4.7	-69	5.0	-80	2.5	7.4	6.8	13	0.89
ller Industries	127.3	-3	258.4	4	5.3	33	9.5	26	4.2	3.1	8.5	16	1.78
mont Gold	150.1	10	278.0	1	28.1	63	47.5	1	18.7	12.6	10.6	54	0.84
mont Mining	157.3	-1	295.4	-7	39.5	62	52.1	-24	25.1	15.3	11.7	55	0.95
ps Dodge	629.8	-5	1296.5	3	46.3	-30	106.6	-10	7.4	9.9	14.4	11	4.12
NBANK FINANCIAL													
STRY COMPOSITE	**46156.9**	**6**	**89934.8**	**4**	**4091.3**	**28**	**7603.6**	**22**	**8.9**	**7.3**	**11.9**	**16**	**2.76**
NCIAL SERVICES													
IP COMPOSITE	**28618.0**	**9**	**54652.2**	**7**	**3137.3**	**34**	**5384.2**	**19**	**11.0**	**8.9**	**18.1**	**13**	**3.66**
. Brown	130.0**	32	269.8	21	15.0	56	35.1	33	11.5	9.7	22.7	5	4.31
ghany	451.4	-6	869.7	-1	21.3	-2	54.7	61	4.7	4.6	10.3	11	12.66
rican Express	5680.0**	1	11059.0	0	416.0	34	659.0	18	7.3	5.5	6.7	32	1.01
ficial	482.8	7	982.4	7	48.6	13	98.2	13	10.1	9.5	13.8	13	5.92
k (H&R) (8)	814.3**	10	1123.2	13	183.2	10	191.8	12	22.5	22.5	34.9	21	1.68
ntrywide Credit Industries (10)	218.4	61	405.3	68	43.3	49	82.4	62	19.8	21.4	20.5	11	2.70
vford	146.4	4	294.4	4	9.7	6	19.0	3	6.6	6.5	21.4	16	1.15
ards (A. G.) (10)	314.9	25	620.6	19	38.1	39	74.5	28	12.1	10.9	20.0	9	2.78
fax	298.5	8	574.4	4	23.2	8	41.4	12	7.8	7.8	36.1	18	1.14
ie Mae	3897.7**	7	7760.5	9	498.6	21	982.3	23	12.8	11.3	25.6	12	6.67
ral Home Loan Mortgage	1318.0	20	2483.0	14	180.0	9	382.0	25	13.7	15.0	18.4	15	3.63
American Financial	333.5**	19	612.5	20	17.5	31	22.0	12	5.3	4.8	20.2	6	4.30
Financial Management	387.4**	18	730.8	22	26.8	49	47.4	51	6.9	5.5	2.8	81	0.54
klin Resources (3)	172.0	75	330.9	69	44.8	44	87.0	40	26.0	31.8	25.2	20	1.90
sh & McLennan	783.3**	7	1617.2	8	86.3	9	193.7	7	11.0	10.8	27.8	20	4.34
rill Lynch	3968.6**	18	7931.7	17	345.0	53	687.4	37	8.7	6.7	23.1	8	10.08
gan Stanley Group (11)	2186.6	18	3982.0	NA	198.8	43	340.7	NA	9.1	7.5	17.7	10	6.70
eWebber Group	954.9**	17	1885.6	12	59.3	30	130.2	8	6.2	5.6	22.8	7	4.27
erica	1283.6**	1	2585.9	-1	186.4	25	393.4	6	14.5	11.7	18.5	12	4.47
e Mae	640.1	-11	1310.9	-8	106.7	9	211.4	10	16.7	13.6	39.3	10	4.52
mon	2585.0**	9	4176.0	-3	433.0	105	368.0	-8	16.8	8.9	13.6	10	4.01
vab (Charles)	264.6	21	534.6	10	31.6	70	67.0	39	11.9	8.5	34.5	16	1.70
samerica	1305.9	9	2511.9	8	123.9	27	215.7	28	9.5	8.1	12.3	12	4.63
RANCE													
UP COMPOSITE	**15043.6**	**5**	**30140.3**	**4**	**1116.8**	**74**	**2215.4**	**48**	**7.4**	**4.5**	**5.7**	**28**	**1.67**
a Life & Casualty	4326.5	1	8620.6	-2	150.8	NM	290.1	257	3.5	NM	2.4	29	2.03
AC	1236.7	29	2358.2	25	58.7	33	112.5	30	4.8	4.6	17.9	15	2.01
erican National Insurance	344.0	7	685.1	7	54.5	67	106.0	31	15.8	10.2	10.9	7	7.62
ital Holding	732.9	2	1449.8	2	91.5	18	157.4	10	12.5	10.8	15.6	13	3.28
seco	268.7**	10	678.7	42	51.4	46	193.8	170	19.1	14.4	40.1	7	9.58
ace Mann Educators	176.2	1	356.4	1	19.7	30	39.0	12	11.2	8.7	20.2	9	2.63
gressive	494.4**	-3	929.5	4	79.7	99	131.3	112	16.1	7.9	34.3	12	3.02
vident Life & Accident	785.4**	11	1483.8	5	60.2	112	93.3	66	7.7	4.0	10.3	8	3.22
eco	939.8**	6	1808.9	2	129.4	207	201.9	59	13.8	4.7	15.3	10	6.15
aul	1069.3	-9	2183.4	-4	108.5	-24	196.5	-21	10.1	12.2	-13.1	NM	-7.02
hmark	543.3	6	1068.6	5	78.2	18	129.3	-1	14.4	13.0	22.2	16	3.57
elers	2526.9	-1	5376.2	0	92.7	40	287.2	138	3.7	2.6	-14.6	NM	-7.39
rin	337.7	2	674.0	4	36.9	26	76.2	12	10.9	8.8	8.5	13	3.30
JM	854.6	15	1677.2	12	80.8	9	156.8	7	9.5	9.9	13.7	14	3.86
ife	407.1	4	789.9	5	23.7	20	44.2	19	5.8	5.1	8.4	13	3.35
INGS & LOAN													
UP COMPOSITE	**2495.4**	**-19**	**5142.4**	**-17**	**-162.8**	**NM**	**4.0**	**-98**	**NM**	**7.0**	**0.9**	**NM**	**0.20**
nanson (H. F.)	665.5**	-28	1477.7	-22	-291.0	NM	-258.1	NM	NM	7.2	-7.8	NM	-1.83
st Savings Financial	137.6**	-14	278.6	-16	5.1	-23	9.3	-3	3.7	4.2	10.0	6	2.20
nfed (6)	273.7**	-31	554.6	-25	-29.9	NM	-41.5	NM	NM	NM	-22.4	NM	-4.07
den West Financial	485.5	-6	960.4	-8	70.6	-5	142.2	-1	14.5	14.4	15.1	9	4.42
at Western Financial	741.5**	-14	1488.8	-16	52.6	-24	97.8	-18	7.1	8.0	0.5	NM	0.07
ndard Federal Bank	191.6**	-6	382.3	-7	29.7	26	54.3	18	15.5	11.6	15.8	8	3.24
FICE EQUIPMENT & COMPUTERS													
USTRY COMPOSITE	**51651.9**	**6**	**99071.6**	**7**	**-6891.2**	**NM**	**-5511.7**	**NM**	**NM**	**0.9**	**-14.9**	**NM**	**-2.38**
INESS MACHINES & SERVICES													
UP COMPOSITE	**4357.6**	**17**	**8525.8**	**16**	**205.9**	**7**	**446.5**	**17**	**4.7**	**5.2**	**16.5**	**21**	**1.42**
& Howell	165.8	5	327.8	6	1.0	NM	1.8	NM	0.6	NM	-26.3	NA	-5.70
mpuCom Systems	239.7	37	440.6	32	2.6	101	4.5	88	1.1	0.7	21.2	11	0.29
International (11)	206.0	18	403.3	17	19.1	53	36.9	317	9.3	7.2	37.3	45	0.61
uxe	362.9	0	768.6	3	2.2	-95	54.0	-44	0.6	13.1	19.5	20	1.92

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COMPANY	SALES 2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	SALES 6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	PROFITS 2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	PROFITS 6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	MARGINS 2ND QUARTER 1993 %	MARGINS 2ND QUARTER 1992 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-23	MY 3-YR EA
Diebold	150.1	12	284.6	11	11.8	36	20.4	36	7.9	6.4	11.5	23	[illegible]
Harland (John H.)	130.0	14	263.5	21	14.1	−3	27.2	−7	10.9	12.8	21.2	17	[illegible]
HON Industries	177.5	8	363.6	13	8.2	−6	16.4	3	4.6	5.4	23.3	22	[illegible]
Intelligent Electronics (11)	616.9	24	1187.2	28	8.3	5	15.0	−17	1.3	1.6	8.2	25	[illegible]
MicroAge (3)	392.1	54	756.7	55	3.0	100	5.1	86	0.8	0.6	11.6	16	[illegible]
Miller (Herman) (7)	233.6	9	451.1	9	8.9	NM	16.1	NM	3.8	NM	8.1	31	[illegible]
Pitney Bowes	874.4	5	1707.8	4	87.3	18	169.4	20	10.0	8.8	19.3	19	[illegible]
Reynolds & Reynolds (3)	169.8	6	340.9	6	13.7	41	27.3	43	8.1	6.1	18.7	18	[illegible]
Standard Register	174.7	1	344.0	1	9.5	1	18.9	4	5.5	5.5	11.5	14	[illegible]
Tech Data (11)	332.3	65	616.2	53	6.4	65	12.1	52	1.9	1.9	11.9	20	[illegible]
Wallace Computer Services (5)	131.8	10	269.8	7	9.7	0	21.3	3	7.3	8.0	11.2	13	[illegible]
(b) **COMPUTERS & PERIPHERALS GROUP COMPOSITE**	**39407.6**	**3**	**75027.5**	**4**	**−7923.9**	**NM**	**−7608.4**	**NM**	**NM**	**NM**	**−26.3**	**NM**	**−[illegible]**
Amdahl	463.2	−33	843.9	−29	−23.7	NM	−272.2	NM	NM	2.4	−26.6	NM	−[illegible]
Apple Computer (3)	1862.0	7	3835.9	11	−188.3	NM	−77.4	NM	NM	7.6	7.9	17	[illegible]
Compaq Computer	1632.3	97	3243.7	101	102.3	253	204.6	175	6.3	3.5	16.1	12	[illegible]
Conner Peripherals	490.6	−11	1048.9	6	−58.8	NM	−81.4	NM	NM	8.3	−5.0	NM	−[illegible]
Cray Research	187.7	1	390.3	11	6.2	398	21.3	314	3.3	0.7	0.2	NM	[illegible]
Data General (3)	252.4	−3	519.9	−2	−16.4	NM	−24.0	NM	NM	NM	−5.3	NM	−[illegible]
Dell Computer (11)	672.4	84	1292.7	98	10.2	−49	41.5	18	1.5	5.4	24.1	8	[illegible]
Digital Equipment (6)	3914.0	0	7367.6	3	113.2	NM	83.1	NM	2.9	NM	−5.3	NM	−[illegible]
Dynatech (9)	132.7	9	272.5	12	3.6	157	9.2	97	2.7	1.1	10.8	14	[illegible]
Hewlett-Packard (2)	5096.0	22	9669.0	20	347.0	7	608.0	−3	6.8	7.7	10.7	23	[illegible]
Intergraph	249.1	−14	531.2	−6	−18.6	NM	−28.8	NM	NM	1.0	−3.6	NM	−[illegible]
International Business Machines	15519.0	−4	28577.0	−6	−8036.0	NM	−8321.0	NM	NM	4.5	−60.8	NM	−29[illegible]
Seagate Technology (6)	770.2	−1	1524.3	−2	33.5	−43	72.5	−27	4.4	7.6	19.4	6	[illegible]
Silicon Graphics (6)	319.3	33	589.9	32	32.4	NM	52.6	NM	10.1	NM	16.5	32	[illegible]
Storage Technology	355.1	−8	688.5	−4	1.3	−81	7.7	−60	0.4	1.7	0.2	NM	[illegible]
Stratus Computer	124.1	6	238.8	5	13.5	0	22.3	−10	10.9	11.5	13.6	13	[illegible]
Sun Microsystems (6)	1260.5	30	2401.9	25	76.1	102	127.8	29	6.0	3.9	9.4	18	[illegible]
Tandem Computers (3)	475.6	−6	993.2	−1	−549.5	NM	−538.4	NM	NM	3.5	−39.8	NM	−[illegible]
3Com (7)	167.5	33	328.9	42	13.3	127	23.4	NM	7.9	4.7	16.5	19	[illegible]
Unisys	1927.2**	−8	3834.7	−6	103.0	17	159.8	17	5.3	4.2	21.1	9	[illegible]
Xerox	3537.0**	0	6835.0	0	112.0	−10	301.0	27	3.2	3.5	−6.9	NM	−[illegible]
(c) **COMPUTER SOFTWARE & SERVICES GROUP COMPOSITE**	**7886.7**	**15**	**15518.3**	**15**	**826.8**	**44**	**1650.2**	**48**	**10.5**	**8.3**	**23.6**	**26**	**1[illegible]**
ASK Group (6)	128.5	−10	228.9	−9	4.8	−41	4.1	−60	3.7	5.7	0.1	NM	[illegible]
Cabletron Systems (10)	131.5	49	254.5	49	26.2	49	50.7	49	19.9	20.0	31.9	32	3[illegible]
Ceridian	225.9	15	450.3	12	8.4	NM	21.3	NM	3.7	NM	NM	16	[illegible]
Cisco Systems (5)	172.4	89	317.4	92	46.3	99	85.0	104	26.9	25.4	36.5	47	1[illegible]
Comdisco (3)	513.0**	−9	1043.0	−5	23.0	35	44.0	NM	4.5	3.0	11.9	8	1[illegible]
Computer Associates International (9)	423.4	15	963.4	15	30.7	60	129.9	69	7.3	5.2	24.4	20	1[illegible]
Computer Sciences (9)	608.1	1	1258.4	1	18.2	13	44.3	11	3.0	2.7	11.5	17	4[illegible]
Electronic Data Systems	2090.5**	4	4150.3	3	178.1	13	329.5	14	8.5	7.8	21.2	20	1[illegible]
EMC	170.9	114	301.5	107	27.0	344	42.9	281	15.8	7.6	22.0	39	[illegible]
First Data	379.1	29	725.9	26	39.1	25	75.3	23	10.3	10.7	18.8	26	1[illegible]
Gtech Holdings (10)	153.9	28	292.0	30	17.4	51	25.6	87	11.3	9.6	26.0	32	1[illegible]
Lotus Development	235.8	7	462.8	3	−4.6	NM	7.6	−79	NM	6.8	12.1	30	1[illegible]
Microsoft (6)	1039.0	27	1997.0	33	265.0	26	508.0	31	25.5	25.8	31.7	25	3[illegible]
Novell (2)	280.7	25	540.9	26	80.5	31	151.3	33	28.7	27.3	24.9	26	[illegible]
Oracle Systems (7)	472.6	31	842.7	30	69.1	140	98.3	116	14.6	8.0	31.0	52	0[illegible]
Safeguard Scientifics	271.9	33	504.3	28	3.1	5	6.7	12	1.1	1.4	10.0	9	2[illegible]
Shared Medical Systems	124.1**	6	241.4	5	7.8	10	15.4	10	6.3	6.1	15.8	15	1[illegible]
SynOptics Communications	180.1	120	332.8	122	24.5	249	46.4	284	13.6	8.6	32.1	29	1[illegible]
Western Digital (6)	285.2	−3	610.6	17	−37.8	NM	−36.2	NM	NM	1.4	−14.9	NM	−0[illegible]
19 **PAPER & FOREST PRODUCTS INDUSTRY COMPOSITE**	**21255.9**	**2**	**41741.0**	**3**	**614.9**	**24**	**1227.9**	**37**	**2.9**	**2.4**	**4.3**	**38**	**1.[illegible]**
(a) **FOREST PRODUCTS GROUP COMPOSITE**	**7968.4**	**5**	**15687.3**	**6**	**266.3**	**130**	**602.3**	**179**	**3.3**	**1.5**	**7.4**	**26**	**1.[illegible]**
Boise Cascade	974.0	6	1958.0	4	−17.1	NM	−29.2	NM	NM	NM	−11.6	NM	−3[illegible]
Georgia-Pacific	3205.0	5	6149.0	5	5.0	25	46.0	NM	0.2	0.1	−0.6	NM	−0[illegible]
Louisiana-Pacific	596.6	11	1245.8	23	65.7	49	153.4	92	11.0	8.2	17.5	14	2.[illegible]
Pope & Talbot	151.2	17	318.8	24	4.7	NM	15.7	NM	3.1	NM	9.6	14	1.[illegible]
Weyerhaeuser	2387.5	2	4728.5	4	181.5	95	358.9	100	7.6	4.0	14.4	15	2.[illegible]
Willamette Industries	654.1	10	1287.1	12	26.6	8	57.5	19	4.1	4.1	7.5	22	1.[illegible]
(b) **PAPER GROUP COMPOSITE**	**13287.6**	**1**	**26053.7**	**1**	**348.6**	**−8**	**625.6**	**−8**	**2.6**	**2.9**	**3.0**	**50**	**0.[illegible]**
Bowater	363.2	2	750.1	3	−15.6	NM	−38.6	NM	NM	NM	−10.1	NM	−2.[illegible]
Champion International	1256.3	2	2523.3	4	−22.3	NM	−50.4	NM	NM	0.2	−1.9	NM	−0.[illegible]
Chesapeake	236.4	3	445.7	1	1.3	−70	0.5	−93	0.5	1.9	2.3	54	0.[illegible]
Consolidated Papers	260.3	17	501.9	14	25.6	69	43.0	45	9.8	6.8	6.8	33	1.[illegible]
International Paper	3500.0	3	6862.0	2	77.0	−32	141.0	−35	2.2	3.4	1.1	NM	0.[illegible]
James River Corp. of Virginia	1198.1	−3	2311.8	−3	13.7	33	3.6	NM	1.1	0.8	−9.0	NM	−1.[illegible]
Kimberly-Clark	1725.9	−1	3427.9	−2	133.3	0	258.1	−3	7.7	7.7	14.5	22	2.[illegible]

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CORPORATE SCOREBOARD

ıPANY	SALES 2ND QUARTER 1993 $ MIL	SALES CHANGE FROM 1992 %	SALES 6 MONTHS 1993 $ MIL	SALES CHANGE FROM 1992 %	PROFITS 2ND QUARTER 1993 $ MIL	PROFITS CHANGE FROM 1992 %	PROFITS 6 MONTHS 1993 $ MIL	PROFITS CHANGE FROM 1992 %	MARGINS 2ND QUARTER 1993 %	MARGINS 2ND QUARTER 1992 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-23	12 MONTHS' EARNINGS PER SHARE
ville	582.0	5	1090.5	4	27.7	79	55.7	126	4.8	2.8	7.6	16	0.47
d	1263.4	3	2398.9	4	47.2	NM	72.8	NM	3.7	NM	8.2	20	2.14
ıtch	326.6	−1	688.2	4	2.8	−92	24.9	−51	0.8	10.6	5.7	24	1.82
· Paper	1209.3	−5	2364.9	−6	23.5	−50	47.0	−49	1.9	3.6	6.1	19	1.66
n Camp	786.5	1	1547.9	1	15.1	−34	27.6	273	1.9	2.9	3.4	48	0.91
ıvaco (2)	579.5	−2	1140.6	1	19.4	−52	40.3	−40	3.4	6.8	6.1	21	1.65
BLISHING & BROADCASTING													
STRY COMPOSITE	**13263.4**	**4**	**25729.6**	**3**	**867.7**	**14**	**1457.5**	**23**	**6.5**	**5.9**	**12.0**	**33**	**1.51**
ADCASTING													
IP COMPOSITE	**3129.3**	**6**	**5939.2**	**2**	**332.6**	**37**	**543.2**	**70**	**10.6**	**8.3**	**17.9**	**24**	**3.99**
ıal Cities/ABC	1438.8	3	2617.2	5	151.9	3	222.4	17	10.6	10.6	11.0	20	25.63
	835.8	7	1714.5	−8	107.4	56	161.6	87	12.9	8.8	45.3	17	15.13
iord Entertainment	195.4	9	333.5	10	13.4	13	13.5	49	6.9	6.6	17.6	53	0.80
imedia	163.5	14	307.6	14	18.3	16	33.5	28	11.2	11.1	NM	18	1.79
om	495.8	10	966.4	10	41.6	NM	112.3	NM	8.4	NM	20.1	42	1.40
LISHING													
IP COMPOSITE	**10134.1**	**3**	**19790.4**	**3**	**535.1**	**3**	**914.3**	**6**	**5.3**	**5.3**	**9.9**	**39**	**1.09**
(A.H.)	143.8	7	266.6	7	16.1	30	23.4	24	11.2	9.3	14.2	23	2.09
merce Clearing House	132.0	−18	296.4	−19	−17.5	NM	−10.0	NM	NM	NM	−8.8	NM	−0.33
Jones	487.0	4	950.5	5	39.8	−5	70.8	3	8.2	9.0	8.3	24	1.22
& Bradstreet	1161.6	0	2233.0	−2	138.8	8	243.9	7	11.9	11.1	28.9	19	3.20
nett	937.8	5	1782.5	6	113.7	16	180.0	18	12.1	11.0	21.8	19	2.57
ht-Ridder	621.7	5	1205.6	5	42.5	−8	65.6	−8	6.8	7.8	11.7	20	2.54
raw-Hill	490.9	1	957.9	2	43.2	17	58.4	19	8.8	7.6	17.9	18	3.35
ia General	152.6	4	296.8	3	8.1	30	11.6	20	5.3	4.3	9.9	27	0.80
· York Times	483.6	9	938.0	7	22.4	60	33.3	21	4.6	3.2	−0.6	NM	−0.08
lastic (7)	163.8	16	295.4	13	10.4	125	16.9	103	6.4	3.3	20.3	25	1.77
ps (E.W.)	309.3	−5	595.1	−7	22.1	−1	54.7	48	7.1	6.8	16.4	15	1.66
Warner	3253.0	5	6511.0	7	−45.0	NM	−60.0	NM	NM	0.3	−29.5	NM	−1.12
s Mirror	902.9	2	1771.3	3	40.3	6	67.4	3	4.5	4.3	2.4	79	0.38
ıne	517.4	−7	952.0	−7	62.3	38	91.9	52	12.0	8.1	17.2	22	2.27
hington Post	376.7	0	738.4	5	38.0	−17	66.5	2	10.1	12.1	12.9	21	10.92
RVICE INDUSTRIES													
STRY COMPOSITE	**21952.4**	**12**	**42550.9**	**11**	**954.2**	**−9**	**1687.4**	**−2**	**4.3**	**5.3**	**14.3**	**20**	**1.26**
STRUCTION & ENGINEERING													
IP COMPOSITE	**5225.3**	**11**	**10123.4**	**10**	**121.8**	**42**	**229.8**	**43**	**2.3**	**1.8**	**14.5**	**21**	**1.43**
gee Enterprises (10)	148.8	14	297.8	9	0.9	188	1.1	−41	0.6	0.2	4.6	31	0.39
er Mfg.	144.8	20	255.5	17	2.4	NM	1.2	NM	1.7	0.1	13.8	20	1.18
G	662.1	−5	1311.0	−3	21.1	−3	40.2	1	3.2	3.1	19.2	12	1.56
r (2)	2006.1	30	3813.0	23	42.0	18	77.6	15	2.1	2.3	15.1	24	1.76
er Wheeler	646.5	11	1233.0	15	14.6	19	27.3	21	2.3	2.1	12.9	22	1.42
bs Engineering Group (3)	258.3	−9	531.5	−4	7.1	13	14.0	−2	2.7	2.2	17.6	19	1.13
ermott International (9)	703.4	−15	1466.1	−9	25.7	837	52.3	NM	3.7	0.3	19.6	18	1.73
rison Knudsen	655.4**	25	1215.6	18	8.2	18	16.1	17	1.3	1.3	4.2	51	0.51
USTRIAL DISTRIBUTION													
UP COMPOSITE	**6132.8**	**18**	**11968.7**	**17**	**218.3**	**18**	**426.3**	**24**	**3.6**	**3.6**	**14.1**	**22**	**1.32**
ıem Electronics	161.0	32	303.1	22	6.3	−12	11.8	−19	3.9	5.8	13.8	15	2.24
ıw Electronics	584.1	53	1135.5	49	19.1	66	37.1	78	3.3	3.0	17.3	17	2.21
ned	127.2	30	247.8	30	4.9	12	8.9	19	3.8	4.4	11.6	19	1.62
er Scientific International	240.9	19	469.1	18	8.6	32	14.6	28	3.6	3.2	19.2	18	1.84
uine Parts	1106.2	9	2144.1	9	65.9	10	122.3	10	6.0	5.9	18.0	18	2.02
y Petroleum (11)	208.0	−13	420.7	−19	0.9	NM	7.7	NM	0.5	NM	0.1	NM	0.00
nger (W.W.)	660.4	9	1266.6	11	35.4	−2	69.6	8	5.4	5.9	15.4	20	2.71
hes Supply (11)	141.6	15	272.5	12	0.6	489	1.7	NM	0.5	0.1	3.3	24	0.66
ıan	194.9**	4	392.8	0	4.8	0	8.8	1	2.5	2.5	8.3	11	0.96
shall Industries (7)	190.1	22	346.4	16	7.2	13	11.8	6	3.8	4.1	12.2	15	2.77
:e Depot	527.9	36	1110.0	35	10.9	68	25.0	58	2.1	1.7	11.7	54	0.51
eer-Standard Electronics (9)	134.5	31	252.6	29	4.5	46	8.1	84	3.3	3.0	16.2	12	1.49
nier Industrial (7)	184.5	10	352.4	9	25.2	12	45.1	10	13.6	13.4	22.4	27	1.02
ıles (11)	251.0	34	513.4	31	2.3	77	12.9	NM	0.9	0.7	6.8	38	0.71
	154.4	0	280.1	2	5.6	−9	10.6	3	3.6	3.9	21.1	16	0.77
ed Stationers (4)	365.8	43	744.6	44	4.8	33	10.4	47	1.3	1.4	7.3	14	0.92
ıar (10)	488.0	4	903.5	3	3.3	33	3.8	0	0.7	0.5	3.6	41	0.31
R	127.1	6	252.6	7	1.4	−32	2.7	−25	1.1	1.7	19.8	15	0.76
cox & Gibbs	147.6	41	278.5	36	2.1	156	4.0	234	1.5	0.8	−10.7	NM	−0.57
e Laboratories (11)	137.6	12	282.5	16	4.5	41	9.3	55	3.3	2.6	10.5	9	1.52
LUTION CONTROL													
UP COMPOSITE	**4287.6**	**9**	**8266.1**	**8**	**304.0**	**−38**	**592.4**	**−23**	**7.1**	**12.4**	**14.3**	**21**	**1.17**
& Water Technologies (2)	188.2	9	359.0	10	1.4	NM	1.7	NM	0.7	NM	−3.7	NM	−0.33
wning-Ferris Industries (3)	892.7	7	1718.2	6	41.2	−11	92.1	8	4.6	5.6	13.4	23	1.15
mical Waste Management	534.0	34	1029.4	34	22.6	−57	43.9	−47	4.2	13.2	8.6	19	0.44
International	382.2	5	733.6	3	21.1	−66	37.7	−50	5.5	17.0	3.7	NM	0.08
X Technologies	2290.6	5	4425.9	6	217.7	−34	417.0	−20	9.5	15.2	18.8	19	1.67

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CORPORATE SCOREBOARD

COMPANY	SALES 2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	PROFITS 2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	MARGINS 2ND QUARTER 1993 %	MARGINS 2ND QUARTER 1992 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-23	MC EA S E
(d) **PRINTING & ADVERTISING**													
GROUP COMPOSITE	**1865.8**	**1**	**3577.4**	**1**	**119.9**	**6**	**118.5**	**-29**	**6.4**	**6.1**	**13.6**	**21**	1
ADVO (3)	222.2	6	421.6	8	7.7	0	9.1	10	3.5	3.7	18.8	19	(
Banta	165.9	9	328.0	8	10.5	22	18.8	18	6.3	5.7	14.5	16	
Donnelley (R.R.) & Sons	994.0	-1	1954.3	0	52.8	-2	30.7	-66	5.3	5.3	10.2	26	4
Interpublic Group	483.8**	0	873.5	-1	49.0	13	60.0	14	10.1	8.9	23.0	16	7
(e) **OTHER SERVICES**													
GROUP COMPOSITE	**4440.8**	**13**	**8615.2**	**13**	**190.2**	**11**	**320.4**	**13**	**4.3**	**4.4**	**14.9**	**18**	17
Adia Services	218.5**	23	427.3	25	4.6	50	8.2	98	2.1	1.7	8.0	18	1
American Bldg. Maintenance (2)	188.7	-1	375.9	1	2.7	-6	5.0	1	1.4	1.5	11.4	12	.
CDI	233.5	9	451.0	8	1.6	96	2.5	70	0.7	0.4	4.1	31	(
Cintas (7)	124.3	19	237.1	17	12.6	16	23.7	17	10.2	10.4	17.3	27	(
Handleman (8)	251.9	-6	587.5	2	10.5	7	24.9	13	4.2	3.7	15.2	8	1
InaCom	379.3	50	710.6	43	3.8	58	6.5	59	1.0	0.9	10.1	14	1
Kelly Services	483.8	16	936.4	18	10.0	18	16.9	15	2.1	2.0	11.2	24	1
Mid Atlantic Medical Services	160.5	13	321.3	16	3.1	100	8.4	65	1.9	1.1	32.1	23	1
Olsten	286.5**	22	553.9	22	7.0	44	12.2	45	2.4	2.1	13.4	27	(
PHH (8)	515.1	4	1009.2	4	16.6	11	31.0	10	3.2	3.0	12.9	13	3
Pinkerton's	166.3	2	330.6	3	1.7	28	2.9	15	1.0	0.8	7.8	21	1
Rollins	163.2	9	290.5	9	19.1	16	24.9	16	11.7	10.9	31.3	20	1
Safety-Kleen	189.3	3	371.1	4	10.5	-27	19.1	-28	5.5	7.9	7.7	25	(
Service Corp. International	217.0	16	441.4	14	24.3	22	53.6	19	11.2	10.6	11.7	19	1
ServiceMaster	728.7	15	1313.9	13	62.1	3	83.3	5	8.5	9.5	62.9	11	2
Volt Information Sciences (2)	134.1	5	257.5	7	0.1	-40	-2.7	NM	0.1	0.1	2.8	40	(
22 **TELECOMMUNICATIONS**													
INDUSTRY COMPOSITE	**50181.8**	**4**	**98912.6**	**4**	**4493.2**	**8**	**8309.9**	**2**	**9.0**	**8.6**	**17.3**	**19**	2
(a) **EQUIPMENT & SERVICES**													
GROUP COMPOSITE	**22689.7**	**5**	**44557.0**	**5**	**1448.5**	**12**	**2652.0**	**8**	**6.4**	**6.0**	**23.4**	**22**	2
American Telephone & Telegraph	16316.0	3	32035.0	3	1044.0	9	2040.0	11	6.4	6.1	31.0	21	2
Comsat	154.1	16	320.4	23	20.2	20	38.5	19	13.1	12.7	7.5	25	1
DSC Communications	168.7	31	324.9	40	18.2	798	29.6	NM	10.8	1.6	15.6	51	1
MCI Communications	2929.0	12	5739.0	12	178.0	19	346.0	19	6.1	5.7	19.8	24	1
Pacific Telecom	176.2	4	347.3	3	14.0	18	28.2	-14	7.9	7.0	10.9	15	1
Sprint	2800.9	9	5518.9	9	165.1	12	153.8	-39	5.9	5.7	10.9	23	1
Telephone & Data Systems	144.8	30	271.5	29	9.0	29	15.9	-21	6.2	6.3	3.0	63	0
(b) **TELEPHONE COMPANIES**													
GROUP COMPOSITE	**27492.1**	**2**	**54355.7**	**3**	**3044.7**	**7**	**5657.9**	**0**	**11.1**	**10.6**	**15.4**	**17**	2
Alltel	568.9	10	1115.6	9	63.8	11	127.0	19	11.2	11.1	18.2	20	1
Ameritech	2950.8	5	5747.3	5	389.6	14	689.6	1	13.2	12.2	18.9	16	5
Bell Atlantic	3220.1	2	6383.4	2	385.5	22	757.7	15	12.0	9.9	18.4	17	3
BellSouth	3906.9	2	7740.6	2	433.1	-6	844.3	-8	11.1	12.0	11.3	18	3
Cincinnati Bell	272.8	-1	544.0	-5	13.5	18	34.3	33	5.0	4.1	7.5	30	0
GTE	4916.0	-3	9742.0	-1	438.0	6	898.0	12	8.9	8.1	18.4	18	2
Nynex	3364.3	2	6684.5	2	340.2	3	671.3	1	10.1	10.1	13.5	14	6
Pacific Telesis Group	2578.0	3	5103.0	4	291.0	1	293.0	-48	11.3	11.6	13.4	23	2
Rochester Telephone	222.9	12	433.8	11	19.8	20	37.8	19	8.9	8.3	12.5	19	2
Southern New England Telecomms.	410.7**	1	813.0	1	40.9	0	77.4	-3	10.0	10.1	14.6	14	2
Southwestern Bell	2539.3	6	4997.1	7	338.0	11	640.5	13	13.3	12.7	19.2	18	2
US West	2541.5	4	5051.4	4	291.2	6	586.9	3	11.5	11.3	13.8	17	2
23 **TRANSPORTATION**													
INDUSTRY COMPOSITE	**31601.8**	**9**	**61318.0**	**7**	**1261.4**	**NM**	**1654.6**	**NM**	**4.0**	**NM**	**5.4**	**43**	1.
(a) **AIRLINES**													
GROUP COMPOSITE	**13830.1**	**13**	**26639.7**	**10**	**130.5**	**NM**	**-213.6**	**NM**	**0.9**	**NM**	**-22.3**	**NM**	-4.
Alaska Air Group	277.5	0	527.7	1	-3.6	NM	-18.6	NM	NM	NM	-40.3	NM	-5.
America West Airlines	324.9	-3	641.5	-4	10.3	NM	12.4	NM	3.2	NM	NM	NM	-3.
AMR	4212.0	17	8026.0	13	47.0	NM	25.0	NM	1.1	NM	-9.1	NM	-4.
Delta Air Lines (6)	3131.5	11	6058.1	7	7.1	NM	-126.8	NM	0.2	NM	-20.6	NM	-10.
Southwest Airlines	520.5	25	974.3	23	41.9	78	64.6	75	8.0	5.6	13.3	39	0.
UAL	3548.0	13	6880.0	13	22.0	NM	-115.0	NM	0.6	NM	-30.7	NM	-14.
USAir Group	1815.8	7	3532.1	5	5.8	NM	-55.2	NM	0.3	NM	NM	NM	-9.
(b) **RAILROAD**													
GROUP COMPOSITE	**8592.8**	**5**	**16917.1**	**4**	**871.8**	**310**	**1481.5**	**96**	**10.1**	**2.6**	**15.4**	**16**	3.
Burlington Northern	1142.0	5	2312.0	2	72.0	100	154.0	21	6.3	3.3	21.7	16	3.
Chicago & North Western Holdings	257.0	7	511.7	6	18.7	61	33.3	100	7.3	4.9	34.0	16	1.
Conrail	873.0	4	1689.0	3	85.0	10	131.0	14	9.7	9.1	10.6	15	3.
CSX	2264.0	3	4387.0	3	154.0	NM	145.0	NM	6.8	NM	14.4	18	4.
Illinois Central	132.1	2	274.8	2	19.9	18	43.9	16	15.1	13.0	22.7	15	1.
Kansas City Southern Industries	231.7**	30	446.3	26	21.5	36	43.6	43	9.3	8.9	16.2	23	1
Norfolk Southern	1170.0**	2	2290.0	2	155.2	7	294.1	4	13.3	12.6	12.6	16	4.
Santa Fe Pacific	675.0	12	1328.3	9	147.5	457	274.6	402	21.9	4.4	23.4	12	1.
Union Pacific	1848.0	4	3678.0	4	198.0	-4	362.0	3	10.7	11.6	16.1	17	3.

Footnotes on page 51

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CORPORATE SCOREBOARD

COMPANY	SALES 2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	PROFITS 2ND QUARTER 1993 $ MIL	CHANGE FROM 1992 %	6 MONTHS 1993 $ MIL	CHANGE FROM 1992 %	MARGINS 2ND QUARTER 1993 %	MARGINS 2ND QUARTER 1992 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-23	MO EAR P SH
(c) **TRANSPORTATION SERVICES**													
GROUP COMPOSITE	**4109.5**	**8**	**7989.9**	**7**	**124.9**	**55**	**170.5**	**NM**	**3.0**	**2.1**	**8.0**	**23**	**1.**
Air Express International	168.5	−1	321.9	−1	5.4	5	8.8	6	3.2	3.0	28.1	12	1.
Airborne Freight	419.9	17	818.6	14	6.3	NM	9.9	NM	1.5	NM	5.1	29	0.
Federal Express (7)	2038.7	8	3978.4	5	55.8	56	59.6	NM	2.7	1.9	6.6	27	2.
Ryder System	1080.2	4	2079.9	5	40.7	17	60.7	29	3.8	3.4	8.4	21	1.
Trinity Industries (9)	402.2	10	791.1	19	16.8	102	31.5	148	4.2	2.3	10.5	22	2.
(d) **TRUCKING & SHIPPING**													
GROUP COMPOSITE	**5069.4**	**11**	**9771.2**	**7**	**134.2**	**−4**	**216.2**	**−8**	**2.6**	**3.0**	**8.7**	**21**	**1.**
Alexander & Baldwin	212.7**	16	399.1	13	17.4	−16	35.4	−1	8.2	11.3	10.6	19	1.
American President	581.8**	0	1210.6	−3	21.3	−19	33.4	−24	3.7	4.5	14.8	10	4.
Arkansas Best	244.6	1	473.8	1	4.4	3	6.6	−19	1.8	1.8	8.3	12	0.
Carolina Freight	196.8	7	384.1	8	−0.5	NM	−0.9	NM	NM	0.2	−5.6	NM	−1.
Consolidated Freightways	1020.2	2	2013.2	1	8.4	−14	16.7	86	0.8	1.0	−3.3	NM	−0.
GATX	289.4**	12	526.5	7	26.2	59	44.8	39	9.1	6.4	5.1	27	1.
Greyhound Lines	167.9	−1	318.2	−2	5.6	NM	1.2	NM	3.3	0.2	45.6	9	2.
Hunt (J. B.) Transport Services	260.4	16	507.6	19	13.5	33	18.5	12	5.2	4.5	12.5	21	1.
Landstar System	197.0	14	368.2	15	4.1	121	4.1	136	2.1	1.1	14.6	20	0.
Roadway Services	939.3	17	1795.3	12	27.3	−16	47.6	−25	2.9	4.0	13.1	19	3.
TNT Freightways	226.5	15	439.5	16	8.4	12	12.5	22	3.7	3.8	13.9	20	1.
Yellow	732.9	29	1335.1	18	−1.9	NM	−3.6	NM	NM	1.8	3.0	42	0.
24 **UTILITIES & POWER**													
INDUSTRY COMPOSITE	**41964.3**	**7**	**88320.2**	**7**	**3665.0**	**8**	**8562.1**	**12**	**8.8**	**8.7**	**11.4**	**15**	**2.**
(a) **ELECTRIC, WATER & COGENERATION**													
GROUP COMPOSITE	**36582.4**	**5**	**75771.9**	**6**	**3346.3**	**2**	**7477.9**	**7**	**9.2**	**9.4**	**11.2**	**15**	**2.**
Allegheny Power System	552.4	−1	1167.1	−1	48.6	3	120.5	1	8.8	8.5	11.1	15	3.
American Electric Power	1210.0	3	2531.5	2	101.3	13	249.5	7	8.4	7.7	11.3	14	2.
American Water Works	179.9	7	335.4	5	21.9	8	32.0	−1	12.1	12.0	10.4	14	2.
Baltimore Gas & Electric	564.7	4	1248.5	3	55.9	47	121.7	25	9.9	7.0	9.7	15	1.
Boston Edison	346.1	15	700.8	9	22.8	361	38.3	104	6.6	1.6	13.2	12	2.
Carolina Power & Light	674.6	9	1382.1	8	70.0	1	164.0	0	10.4	11.1	14.4	14	2.
Centerior Energy	589.0	1	1187.1	1	50.1	37	101.4	35	8.5	6.3	8.4	11	1.
Central & South West	859.0	13	1676.0	16	73.0	−6	123.0	−13	8.5	10.2	12.6	17	1.
Central Maine Power	199.0	−2	435.0	−3	13.7	−9	35.3	−4	6.9	7.4	10.1	13	1.
Cincinnati Gas & Electric	367.5	10	860.9	10	39.9	−9	108.3	−3	10.9	13.2	10.2	14	2.
Cipsco	189.3	13	400.6	13	13.6	−23	31.2	0	7.2	10.6	11.9	15	2.
CMS Energy	742.0	9	1788.0	8	27.0	69	102.0	46	3.6	2.4	−33.7	NM	−3.
Commonwealth Edison	1430.5	0	2913.9	2	75.1	−29	142.6	−18	5.3	7.4	7.3	15	1.
Commonwealth Energy System	203.3	5	480.2	6	2.2	144	26.2	23	1.1	0.5	13.1	11	4.
Consolidated Edison Co. of N.Y.	1396.0	9	2982.1	9	62.5	−19	216.4	12	4.5	6.1	12.0	14	2.
Destec Energy	158.3	70	284.7	53	23.1	16	46.3	30	14.6	21.3	16.6	12	1.
Detroit Edison	835.2	−3	1710.0	−3	102.7	−18	237.9	−16	12.3	14.5	16.2	10	3.
Dominion Resources	1005.3	15	2111.1	16	114.1	57	247.5	38	11.4	8.3	11.9	15	3.
DPL	242.1	6	591.7	13	33.7	2	89.2	3	13.9	14.4	13.9	15	1.
DQE	278.7	−4	565.5	−4	35.3	8	69.5	0	12.7	11.2	12.0	13	2.
Duke Power	987.2	10	1995.0	6	122.5	41	264.2	37	12.4	9.7	12.5	16	2.
Florida Progress	553.3	8	1046.6	7	46.9	20	84.4	15	8.5	7.6	10.7	16	2.
FPL Group	1349.9	7	2482.2	5	121.8	6	225.1	13	9.0	9.1	12.6	14	2.
General Public Utilities	863.2	6	1744.4	2	67.3	30	155.3	16	7.8	6.4	11.1	13	2.
Hawaiian Electric Industries	281.6	17	561.0	17	20.6	20	31.5	−2	7.3	7.1	11.1	15	2.
Illinois Power	350.5	4	745.6	4	29.3	43	57.2	61	8.4	6.1	8.1	17	1.
Ipalco Enterprises	153.1	2	322.2	4	17.3	21	48.0	13	11.3	9.5	11.8	15	2.
Kansas City Power & Light	208.3	6	399.7	6	25.7	21	41.5	40	12.4	10.9	11.2	16	1.
LG&E Energy	200.4	6	438.8	11	19.2	2	40.9	19	9.6	9.9	11.9	16	2.
Long Island Lighting	604.9	4	1365.3	7	56.8	−4	124.7	−1	9.4	10.2	11.0	13	2.
Montana Power	221.2**	10	524.0	11	5.0	−1	45.0	−4	2.3	2.5	11.4	14	1.
New England Electric System	518.1	4	1097.6	2	21.8	−34	78.0	−22	4.2	6.6	10.8	17	2.
New York State Electric & Gas	388.6	−3	911.0	2	21.5	−54	95.5	−22	5.5	11.6	8.3	18	1.
Niagara Mohawk Power	929.2	5	2065.3	8	65.3	−9	192.3	10	7.0	8.1	10.5	14	1.
Northeast Utilities	853.8	19	1812.0	22	30.4	−60	106.9	−34	3.6	10.5	8.9	18	1.
Ohio Edison	555.4	−2	1159.6	1	71.5	16	146.1	7	12.9	10.9	10.9	14	1.
Oklahoma Gas & Electric	341.8	12	645.2	14	20.4	20	27.1	108	6.0	5.6	12.7	12	2.
Orange & Rockland Utilities	215.1	17	479.1	13	6.6	−6	21.7	14	3.1	3.8	12.0	14	3.
Pacific Gas & Electric	2464.1	−2	4927.9	0	245.4	−27	501.0	−18	10.0	13.4	11.8	15	2.
Pennsylvania Power & Light	620.4	−4	1347.8	−4	69.9	0	185.6	2	11.3	10.8	12.9	15	2.
Philadelphia Electric	901.7	0	1973.2	−1	107.7	14	270.0	48	11.9	10.4	12.5	13	2.
Pinnacle West Capital	413.7	0	788.8	4	46.8	0	82.2	31	11.3	11.3	11.1	12	1.
Portland General	192.2	−2	469.9	8	16.4	11	56.0	26	8.5	7.5	13.5	10	2.
Potomac Electric Power	419.7	7	759.1	6	77.0	57	90.1	57	18.4	12.6	12.1	15	1.

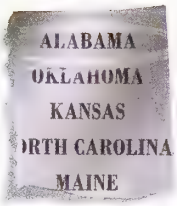
Footnotes on page 51

Just Below California.
According to Site Selection magazine, we're ranked fifth in the nation for new plants and expansion, and number five in long term rankings.

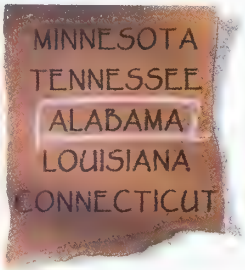
Where exactly is Alabama?

Not Far From Alaska.
Now there's a state that doesn't have many people or much crime. Yet our crime rate is even lower.

It's the same place it was when you studied geography. But in economics, humanities, history, and science, it's probably a long way from where you think. In fact, during the past few years Alabama has risen in several business and lifestyle rankings, surpassing states that are larger and more populated. The surge in popularity is taking place for a combination of reasons. First of all, Alabama's always been known for its natural beauty. But now these resources have been combined with a modern, pro-business environment, creating a total package that's greater than the sum of some very strong parts. As a result, our research parks, health care industry, skilled labor force, and joint programs between education and business are drawing attention and praise both nationally and internationally. And that's really putting Alabama on the map.



Way Past North Carolina.
The average annual pay for workers is higher here than a state with a reputation for prosperity.



Right Between Tennessee And Louisiana.
In 1990, we had a civilian labor force of 1,892,000, one of the highest in the region.

A Little Above Rhode Island.
Alabama has more Fortune 500 headquarters than states you would expect to find ahead of us in this category.

ALABAMA

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CORPORATE SCOREBOARD

COMPANY	SALES 2ND QUARTER 1993 $ MIL	SALES CHANGE FROM 1992 %	SALES 6 MONTHS 1993 $ MIL	SALES CHANGE FROM 1992 %	PROFITS 2ND QUARTER 1993 $ MIL	PROFITS CHANGE FROM 1992 %	PROFITS 6 MONTHS 1993 $ MIL.	PROFITS CHANGE FROM 1992 %	MARGINS 2ND QUARTER 1993 %	MARGINS 2ND QUARTER 1992 %	RETURN ON COMMON EQUITY 12 MONTHS ENDING 6-30	PRICE-EARNINGS RATIO 7-23	MO EAR
Public Service Co. of Colorado	448.0	6	1055.4	11	20.4	−29	79.1	5	4.6	6.9	11.2	15	2
Public Service Co. of New Mexico	190.8	1	439.4	3	5.7	11	17.6	−17	3.0	2.7	−18.0	NM	−2
Public Service Enterprise Group	1246.3	5	2841.0	5	129.5	37	348.4	21	10.4	8.0	11.1	15	2
Puget Sound Power & Light	237.6	−1	561.6	8	26.2	−11	80.9	4	11.0	12.3	11.3	13	2
Rochester Gas & Electric	203.3	4	475.5	5	6.9	NM	36.0	51	3.4	NM	11.1	13	2
San Diego Gas & Electric	467.3	7	959.6	6	44.2	6	102.8	7	9.5	9.5	14.2	15	1
Scana	280.4	10	602.2	9	28.5	55	75.2	39	10.2	7.2	11.7	15	3
SCEcorp	1767.7	0	3552.7	2	151.6	−10	311.0	−7	8.6	9.5	12.0	15	1
Southern	2068.0	3	3908.0	2	274.3	10	475.6	3	13.3	12.4	13.7	14	3
Southwestern Public Service (4)	193.3	10	373.0	7	22.1	2	44.0	4	11.5	12.4	14.5	14	2
Teco Energy	314.6	11	596.9	9	39.2	10	64.9	3	12.5	12.5	15.6	19	2
Texas Utilities	1256.0	5	2398.4	6	192.7	3	375.8	24	15.3	15.6	10.4	15	3
Union Electric	512.2	2	965.2	4	86.8	29	131.1	32	17.0	13.4	14.9	13	3
UtiliCorp United	329.4	30	810.3	31	7.3	NM	42.1	88	2.2	NM	8.0	17	1
WPL Holdings	168.5	19	372.3	17	7.9	−1	28.6	4	4.7	5.7	11.4	17	2
Zurn Industries (9)	288.8	102	446.8	51	−16.6	NM	−7.8	NM	2.3	3.9	11.4	14	2
(b)**GAS, OIL & TRANSMISSION GROUP COMPOSITE**	**5381.9**	**23**	**12548.3**	**18**	**318.7**	**154**	**1084.1**	**54**	**5.9**	**2.9**	**14.1**	**15**	**2**
Brooklyn Union Gas (3)	208.5	14	697.9	14	−6.7	NM	65.2	22	NM	NM	10.3	16	1
Eastern Enterprises	259.7	4	628.1	4	3.3	−56	26.3	−29	1.3	3.0	5.1	22	1
El Paso Natural Gas	220.6	17	431.5	19	20.7	20	51.5	13	9.4	9.2	11.6	17	2
Enron	1900.0	45	3738.6	33	58.2	16	206.5	24	3.1	3.8	14.8	22	3
MCN	287.5	7	844.3	5	2.1	20	56.4	−5	0.7	0.7	11.4	18	1
National Fuel Gas (3)	185.3	5	576.8	10	3.2	59	48.4	15	1.7	1.1	9.6	17	1
Nicor	278.1	14	950.7	18	16.7	4	63.1	15	6.0	6.6	15.2	14	1
Oneok (4)	187.5	25	501.4	21	2.8	4	34.0	31	1.5	1.8	10.9	14	1
Panhandle Eastern	573.8	18	1186.4	2	34.4	197	103.9	44	6.0	2.4	15.3	12	2
Piedmont Natural Gas (2)	205.1	36	407.7	26	22.6	13	49.8	12	11.0	13.2	13.3	15	1
Sonat	356.5	21	853.4	19	125.9	NM	194.8	402	35.3	NM	21.1	11	5
Wicor	177.3	23	438.9	16	−0.5	NM	22.6	34	NM	NM	10.1	18	1
Williams	541.9	−1	1292.7	13	36.1	482	161.7	254	6.7	1.1	16.2	11	4

ALPHABETICAL LIST OF COMPANIES

The number following each company name identifies the Scoreboard category under which it is listed

A

A&P **10c**
Abbott Laboratories **12d**
Adia Services **21e**
Advanced Micro **9d**
ADVO **21d**
Aetna Life & Casualty **17b**
AFLAC **17b**
Ahmanson (H F.) **17c**
Air & Water Techs. **21c**
Air Express Intl **23c**
Air Products & Chemicals **4**
Airborne Freight **23c**
Alaska Air Group **23a**
Albany International **15d**
Alberto-Culver **6d**
Albertson's **10c**
Alco Standard **5**
Alcoa **16a**
Alexander & Baldwin **23d**
Alex. Brown **17a**
Alleghany **17a**
Allegheny Ludlum **16b**
Allegheny Power **24a**
Allergan **12b**
Alliant Techsystems **15a**
AlliedSignal **5**
Alltel **22b**
Amax **16a**
Amdahl **18b**
Amerada Hess **11b**
America West **23a**
American Brands **6e**
American Building **21e**
American Cyanamid **4**
American Electric **24a**
American Express **17a**
American Greetings **14d**
American Home **12b**
American Maize-Products **10b**
American Medical **12c**
American National **17b**
American President **23d**
American Stores **10c**
American Water Works **24a**
Ameritech **22b**
Ames Dept. Stores **8**
Ametek **9c**
Amgen **12b**
Amoco **11b**
Amoskeag **15d**
AMP **9d**
Amphenol **9d**
AMR **23a**
AmSouth Bancorporation **3c**
Analog Devices **9d**
Anheuser-Busch **6c**
Anthem Electronics **21b**
Apogee Enterprises **21a**
Apple Computer **18b**
Applied Materials **15c**
Arbor Drugs **12a**
Arco Chemical **4**
Arkansas Best **23d**
Armco **16b**
Armstrong World **6b**
Arrow Electronics **21b**
Arvin Industries **2b**
Asarco **16c**
Ashland Coal **11a**
Ashland Oil **11b**
ASK Group **18c**
AT&T **22a**
Atlantic Richfield **11b**
AutoZone **8**
Avery Dennison **15a**
Avon Products **6d**
Aztar **14c**

B

Baker (J.) **8**
Baker Hughes **11c**
Ball **7a**
Baltimore G&E **24a**
Banc One **3b**
Bancorp Hawaii **3d**
Bandag **2c**
Bank of Boston **3a**
Bank of New York **3a**
BankAmerica **3d**
Bankers Trust **3a**
Banta **21d**
Bard (C. R.) **12d**
Barnes Group **15a**
Barnett Banks **3c**
Baroid **11c**
Bassett Furniture Inds. **6b**
Bausch & Lomb **12d**
Baxter International **12d**
Beckman Instruments **9c**
Becton, Dickinson **12d**
Bell & Howell **18a**
Bell Atlantic **22b**
BellSouth **22b**
Belo (A. H.) **20b**
Bemis **7b**
Beneficial **17a**
Bergen Brunswig **12a**
Best Buy **6b**
Bethlehem Steel **16b**
Betz Laboratories **4**
Beverly Enterprises **12c**
BIC **15a**
Big B **12a**
Bindley Western Inds. **12a**
Black & Decker **15b**
Blair **8**
Block (H&R) **17a**
Block Drug **6d**
Blockbuster Ent. **14b**
Blount **15b**
Boatmen's Bancshares **3b**
Bob Evans Farms **14a**
Boeing **1**
Boise Cascade **19a**
Borden **10b**
Boston Edison **24a**
Bowater **19b**
Bradlees **8**
Bristol-Myers Squibb **12b**
Brooklyn Union Gas **24b**
Brown Group **6a**
Brown-Forman **6c**
Browning-Ferris **21c**
Brunswick **14d**
Burlington Northern **23b**
Burlington Resources **11b**
Butler Mfg. **21a**

C

Cabletron Systems **18c**
Caesars World **14c**
Caldor **8**
Campbell Soup **10b**
Capital Cities/ABC **20a**
Capital Holding **17b**
Capstead Mortgage **13b**
Cardinal Distribution **12a**
Caremark Intl. **12c**
Carlisle **15a**
Carnival Cruise Lines **14d**
Carolina Freight **23d**
Carolina Power **24a**
Carpenter Tech. **16b**
Carter Hawley Hale **8**
Carter-Wallace **12b**
Casey's General **10c**
Caterpillar **15c**
CBS **20a**
CDI **21e**
Centerior Energy **24a**
Centex **13b**
Central & South West **24a**
Central Maine Power **24a**
Ceridian **18c**
Champion Intl. **19b**
Charming Shoppes **8**
Chase Manhattan **3a**
Chemed **21b**
Chemical Banking **3a**
Chemical Waste **21c**
Chesapeake **19b**
Chevron **11b**
Chicago & North Western **23b**
Chrysler **2a**
Cincinnati Bell **22b**
Cincinnati G&E **24a**
Cincinnati Milacron **15b**
Cintas **21e**
Cipsco **24a**
Circuit City Stores **6b**
Circus Circus **14c**
Cisco Systems **18c**
Citicorp **3a**
Clark Equipment **15c**
CML Group **8**
CMS Energy **24a**
Coast Savings **17c**
Coastal **11b**
Coca-Cola **6c**
Coca-Cola Bottling **6c**
Coca-Cola Enterprises **6c**
Coleman **9a**
Colgate-Palmolive **6d**
Coltec Industries **5**
Comdisco **18c**
Comerica **3b**
Commerce Clearing **20b**
Commercial Metals **16b**
Commonwealth Ed. **24a**
Commonwealth Energy **24a**
Compaq Computer **18b**
CompuCom Systems **18a**
Computer Associates **18c**
Computer Sciences **18c**
Comsat **22a**
ConAgra **10b**
Cone Mills **15d**
Conner Peripherals **18b**
Conrail **23b**
Conseco **17b**
Consolidated Edison **24a**
Cons. Freightways **23d**
Consolidated Papers **19b**
Consolidated Stores **8**
Continental Bank **3b**
Cooper Industries **9a**
Cooper Tire & Rubber **2c**
Coors (Adolph) **6c**
Corning **15a**
Costco Wholesale **8**
Countrywide Credit **17a**
CPC International **10b**
Cracker Barrel **14a**
Crane **15a**
Crawford **17a**
Cray Research **18b**
Crestar Financial **3c**
Crompton & Knowles **4**
Crown Cork & Seal **7a**
CSX **23b**
CUC International **18a**
Culbro **6e**
Cummins Engine **2b**
Cyprus Minerals **16c**

D

Dairy Mart **10c**
Dana **2b**
Danaher **15b**
Dart Group **5**
Data General **18b**
Dayton Hudson **8**
Dean Foods **10b**
Deere **15c**
Dell Computer **18b**
Delta Air Lines **23a**
Deluxe **18a**
Dentsply International **12d**
Destec Energy **24a**
Detroit Edison **24a**
Dexter **13a**
Dial **5**
Diamond Shamrock **11b**
Diebold **18a**
Digital Equipment **18b**
Dillard **8**
Disney (Walt) **14b**
Dole Food **10b**
Dollar General **8**
Dominion Resources **24a**
Donaldson **2b**
Donnelley (R. R.) **21d**
Dover **15c**
Dow Chemical **4**
Dow Jones **20b**
DPL **24a**
DQE **24a**
Dr Pepper/Seven-U
Dresser Industries **1**
Drug Emporium **12**
DSC Communs. **22**
DuPont **4**
Duke Power **24a**
Dun & Bradstreet **2**
Dynatech **18b**

E

E-Systems **9b**
Eagle Food Centers
Eagle-Picher Industri
Eastern Enterprises
Eastman Kodak **14**
Eaton **2b**
Echlin **2b**
Eckerd (Jack) **12a**
Ecolab **6d**
Edison Brothers **8**
Edwards (A. G.) **17**
EG&G **21a**
El Paso Natural Gas
Electronic Data **18c**
EMC **18c**
Engelhard **4**
Enron **24b**
Enron Oil & Gas **11**
Equifax **17a**
Ethyl **4**
Excel Industries **2b**
Exxon **11b**

Continued on

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STANDARD FEATURES:

- Remarkably quiet ride
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ALPHABETICAL LIST OF COMPANIES

The number following each company name identifies the Scoreboard category under which it is listed

Continued from p. 72

F

F&M Distributors **8**
Fabri-Centers of America **8**
Family Dollar Stores **8**
Fannie Mae **17a**
Fay's **12a**
Federal Express **23c**
Federal Home Loan **17a**
Federal Paper Board **7b**
Federal Signal **15a**
Federal-Mogul **2b**
Federated Dept. Stores **8**
Ferro **4**
Fieldcrest Cannon **15d**
Fifth Third Bancorp **3b**
Figgie International **5**
Fingerhut **8**
First American Finl **17a**
First Bank System **3b**
First Chicago **3b**
First Data **18c**
First Fidelity **3a**
First Financial Mgmt **17a**
First Interstate Bancorp **3d**
First Union **3c**
Firstar **3b**
Fisher Scientific **21b**
Fisher Price **14d**
Fleet Financial Group **3a**
Fleetwood Ents **14d**
Fleming **10a**
Florida Progress **24a**
Fluor **21a**
FMC **15c**
Food Lion **10c**
Foodarama **10c**
Ford Motor **2a**
Forest City Enterprises **13b**
Foster Wheeler **21a**
Foundation Health **12c**
FoxMeyer **12a**
FPL Group **24a**
Franklin Resources **17a**
Freeport McMoRan C&G **16c**
Freeport-McMoRan **4**
Fuller (H B) **4**

G

Galen Health Care **12c**
Gannett **20b**
Gap **8**
GATX **23d**
Gaylord Ent **20a**
GenCorp **1**
Genentech **12b**
General Dynamics **1**
General Electric **5**
General Host **5**
General Instrument **9b**
General Mills **10b**
General Motors **2a**
General Nutrition **10c**
General Public Uts **24a**
General Signal **15c**
Genesco **8**
Genovese Drug Stores **12a**
Genuine Parts **21b**
Geon **4**
Georgia Gulf **4**
Georgia-Pacific **19a**
Gerber Products **10b**
Getty Petroleum **21b**
Giant Food **10c**
Giddings & Lewis **15b**
Gillette **6d**
Glenfed **17c**
GM Hughes Electronics **9b**
Golden West **17c**
Good Guys **6b**
Goodrich (B F) **4**
Goodyear Tire & Rubber **2c**
Goulds Pumps **15c**
Grace (W. R.) **4**
Grainger (W. W.) **21b**
Great A&P **10c**
Great Lakes Chemical **4**
Great Western **17c**
Greif Bros **7b**
Greyhound Lines **23d**
Grossman's **8**
Grumman **1**
GTE **22b**
Gtech Holdings **18c**

H

Handleman **21e**
Hanna (M. A.) **4**
Hannaford Brothers **10c**
Harcourt General **5**
Harland (John H) **18a**
Harley-Davidson **14d**
Harnischfeger **15c**
Hartmarx **6a**
Hasbro **14d**
Hawaiian Electric **24a**
HCA **12c**
Health Care & Retirement **12c**
Healthtrust **12c**
Hechinger **8**
Heilig-Meyers **6b**
Heinz (H J.) **10b**
Helene Curtis Industries **6d**
Hershey Foods **10b**
Hewlett-Packard **18b**
Hillenbrand **15a**
Hillhaven **12c**
Hills Department Stores **8**
Hilton Hotels **14c**
Holly **11b**
Home Depot **8**
Home Shopping **8**
HON Industries **18a**
Honeywell **9c**
Hook-SupeRx **12a**
Horace Mann **17b**
Hormel Foods **10b**
House of Fabrics **8**
Hubbell **9a**
Hudson Foods **10b**
Huffy **14d**
Hughes Supply **21b**
Humana **12c**
Hunt (J. B) **23d**
Huntington Bancshares **3b**

I

IBM **18b**
IBP **10b**
Illinois Central **23b**
Illinois Power **24a**
Illinois Tool Works **15a**
Imo Industries **9c**
InaCom **21e**
Indresco **15c**
Ingersoll-Rand **15c**
Inland Steel **16b**
Integra Financial **3a**
Intel **9d**
Intelligent Electronics **18a**
Interface **15d**
Intergraph **18b**
Interlake **15c**
Intl. Game Technology **15a**
Intl Multifoods **10b**
International Paper **19b**
Interpublic Group **21d**
Interstate Bakeries **10b**
Ipalco Enterprises **24a**
ITT **5**
IVAX **12b**

J

Jacobs Engineering **21a**
James River **19b**
Jamesway **8**
Johnson & Johnson **12d**
Johnson Controls **9c**
Joy Technologies **15c**

K

Kaman **21b**
Kansas City Power & Light **24a**
Kansas City Southern **23b**
Karcher (Carl) Enterprises **14a**
Kaufman & Broad **13b**
Kellogg **10b**
Kellwood **6a**
Kelly Services **21e**
Kendall International **12d**
Kennametal **15b**
Kerr-McGee **11b**
KeyCorp **3a**
Kimberly-Clark **19b**
Kmart **8**
Knight-Ridder **20b**
Kohl's **8**
Kroger **10c**

L

La-Z-Boy Chair **6b**
Ladd Furniture **6b**
Lafarge **13a**
Lands' End **8**
Landstar System **23d**
Leggett & Platt **6b**
Lennar **13b**
Levitz Furniture **6b**
LG&E Energy **24a**
Lifetime **12c**
Lilly (Eli) **12b**
Limited **8**
Litton Industries **9b**
Liz Claiborne **6a**
Lockheed **1**
Loctite **4**
Long Island Lighting **24a**
Longs Drug Stores **12a**
Longview Fibre **7b**
Loral **9b**
Lotus Development **18c**
Louisiana Land **11b**
Louisiana-Pacific **19a**
Lowe's **8**
LSI Logic **9d**
Lubrizol **4**
Lukens **16b**
Lyondell **4**

M

Mac Frugal's **8**
Macy (R. H.) **8**
Magma Copper **16c**
Manor Care **12c**
Manville **19b**
Marion Merrell Dow **12b**
Mark IV Industries **15a**
Marriott **14c**
Marsh & McLennan **17a**
Marsh Supermarkets **10c**
Marshall Industries **21b**
Martin Marietta **1**
Masco **6b**
Mattel **14d**
Maxus Energy **11b**
May Department Stores **8**
Maytag **6b**
McCormick **10b**
McDermott Intl **21a**
McDonald's **14a**
McDonnell Douglas **1**
McGraw-Hill **20b**
MCI Communications **22a**
McKesson **12a**
MCN **24b**
M. D.C. Holdings **13b**
Mead **19b**
Media General **20b**
Medtronic **12d**
Mellon Bank **3a**
Melville **8**
Mercantile Bancorp **3b**
Mercantile Stores **8**
Merck **12b**
Merrill Lynch **17a**
Merry-Go-Round **8**
Meyer (Fred) **8**
Michigan National **3b**
MicroAge **18a**
Micron Technology **9d**
Microsoft **18c**
Mid Atlantic Medical **21e**
Midlantic **3a**
Miller (Herman) **18a**
Millipore **9c**
Minnesota Mining **15a**
Mirage Resorts **14c**
Mitchell Energy **11b**
MNC Financial **3a**
Mobil **11b**
Modine Mfg. **2b**
Mohawk Industries **15d**
Monsanto **4**
Montana Power **24a**
Morgan (J. P.) **3a**
Morgan Stanley **17a**
Morrison Knudsen **21a**
Morrison Restaurants **14a**
Motorola **9b**
Mueller Industries **16c**
Multimedia **20a**
Murphy Oil **11b**
Musicland Stores **14d**

N

Nalco Chemical **4**
Nash Finch **10a**
Nashua **7b**
National City **3b**
National Fuel Gas **24b**
National Health Labs **12c**
National Medical **12c**
National Semicond **9d**
National Service **9a**
National Steel **16b**
NationsBank **3c**
Navistar International **2a**
NBD Bancorp **3b**
NCH **6d**
Neiman Marcus Group **8**
New England Electric **24a**
New York State E&G **24a**
New York Times **20b**
Newell **15a**
Newmont Gold **16c**
Newmont Mining **16c**
Niagara Mohawk **24a**
Nicor **24b**
Nike **6a**
NL Industries **4**
Nordstrom **8**
Norfolk Southern **23b**
Northeast Utilities **24a**
Northern Trust **3b**
Northrop **1**
Northwestern Steel & Wire **16b**
Norwest **3b**
Novell **18c**
Nucor **16b**
Nynex **22b**

O

Occidental Pet **11b**
Office Depot **21b**
Ohio Edison **24a**
Oklahoma G&E **24a**
Olin **4**
Olsten **21e**
Oneok **24b**
Oracle Systems **18c**
Orange & Rockland Uts. **24a**
Oregon Steel Mills **16b**
OrNda HealthCorp **12c**
Outboard Marine **14d**
Owens & Minor **12d**
Owens-Corning **13a**
Owens-Illinois **7a**
Oxford Industries **6a**

P

Paccar **2a**
Pacific G&E **24a**
Pacific Telecom **22a**
Pacific Telesis Group **22b**
PaineWebber Group **17a**
Pall **5**
Pamida Holdings **8**
Panhandle Eastern **24b**
Paragon Trade Brands **7b**
Paramount Communs **14b**
Payless Cashways **8**
Penn Central **5**
Penn Traffic **10c**
Penney (J. C.) **8**
Pennsylvania Power **24a**
Pennzoil **11b**
Pentair **15c**
Pep Boys **8**
PepsiCo **6c**
Perkin-Elmer **9c**
Perry Drug Stores **12a**
Petrie Stores **8**
Pfizer **12b**
Phelps Dodge **16c**
PHH **21e**
Philadelphia Electric **24a**
Philip Morris **6e**
Phillips Petroleum **11b**
Phillips-Van Heusen **6a**
Piedmont Natural Gas **24b**
Pier 1 Imports **6b**
Pilgrim's Pride **10b**
Pinkerton's **21e**
Pinnacle West **24a**
Pioneer-Standard Elect **21b**
Pitney Bowes **18a**
Pittston **11a**
PNC Bank **3a**
Polaroid **14d**
Pope & Talbot **19a**
Portland General **24a**
Potlatch **19b**
Potomac Electric **24a**
PPG Industries **13a**
Praxair **4**
Premark International **5**
Premier Industrial **21b**
Price **8**
Primerica **17a**
Progressive **17b**
Promus **14c**
Provident Life **17b**
PS Co. of Colorado **24a**
PS Co. of New Mexico **24a**
Public Service Ent **24a**
Puget Sound Power **24a**

Q

Quaker State **11b**
Quanex **16b**
Quantum Chemical **4**
QVC Network **8**

R

Ralston Purina **10b**
Raychem **9a**
Raytheon **9b**
Reebok International **6a**
Reliance Electric **9a**
Republic New York **3a**
Revco D. S. **12a**
Reynolds Metals **16a**
Reynolds & Reynolds **18a**
Rhone-Poulenc Rorer **12b**
Richfood Holdings **10a**
Rite Aid **12a**
Riverwood Intl. **7b**
RJR Nabisco **6e**
Roadway Services **23d**
Rochester G&E **24a**
Rochester Telephone **22b**
Rockwell International **5**
Rohm & Haas **4**
Rohr **1**
Rollins **21e**
Rose's Stores **8**
Ross Stores **8**
RPM **13a**
Rubbermaid **15a**
Ruddick **10c**
Russell **6a**
Rust International **21c**
Ryder System **23c**
Rykoff-Sexton **10a**

S

Safeco **17b**
Safeguard Scientifics **18c**
Safety-Kleen **21e**
Safeway **10c**
Sallie Mae **17a**
Salomon **17a**
San Diego G&E **24a**
Santa Fe Pacific **23b**
Scana **24a**
SCEcorp **24a**
Schering-Plough **12b**
Schlumberger **11c**
Scholastic **20b**
Schulman (A.) **4**
Schwab (Charles) **17a**
Scott Paper **19b**
Scripps (E W) **20b**
Seagate Technology **18b**
Sears, Roebuck **8**
Seaway Food Town **10c**
Service Corp. Intl **21e**
Service Merchandise **8**
ServiceMaster **21e**
Shared Medical Systems **18c**
Shaw Industries **15d**
Shawmut National **3a**
Sherwin-Williams **13a**
Shoney's **14a**
ShopKo Stores **8**
Signet Banking **3c**
Silicon Graphics **18b**
Skyline **13b**
Smart & Final **10a**
Smith (A. O.) **2b**
Smith's Food & Drug **10c**
Smithfield Foods **10b**
Snap-on Tools **15b**
Society **3b**
Solectron **9d**
Sonat **24b**
Sonoco Products **7b**
Southdown **13a**
Southern **24a**
Southern New Eng. Tel **22b**
SouthTrust **3c**
Southwest Airlines **23a**
Southwestern Bell **22b**
Southwestern PS **24a**
Spiegel **8**
Springs Industries **15d**
Sprint **22a**
SPX **15b**
St. Paul **17b**
Standard Federal Bank **17c**
Standard Motor Prods **2b**
Standard Register **18a**
Stanley Works **15b**
Staples **21b**
State Street Boston **3a**
Sterling Chemicals **4**
Stewart & Stevenson **15c**
Stone Container **7b**
Stop & Shop **10c**
Storage Technology **18b**
Stratus Computer **18b**
Strawbridge & Clothier **8**
Stride Rite **6a**
Stryker **12d**
Sun **11b**
Sun Microsystems **18b**
Sunbeam-Oster **6b**
Sundstrand **1**
SunTrust Banks **3c**
Super Food Services **10a**
Super Rite **10a**
Supermarkets Gen. **10c**
Supervalu **10a**
SynOptics Communs. **18c**
Syntex **12b**

T

Tambrands **6d**
Tandem Computers **18b**
TBC **21b**
Tech Data **18a**
Teco Energy **24a**
Tecumseh Products **13a**
Tektronix **9c**
Teledyne **5**
Teleflex **1**
Telephone & Data **22a**
Temple-Inland **7b**
Tenneco **5**
Teradyne **9c**
Terra Inds **4**
Texaco **11b**
Texas Industries **13a**
Texas Instruments **9d**
Texas Utilities **24a**
Textron **5**
Thomas & Betts **9a**
Thorn Apple Valley **10b**
3Com **18b**
3M **15a**
Tidewater **11c**
Time Warner **20b**
Times Mirror **20b**
TJX **8**
TNT Freightways **23d**
Torchmark **17b**
Toro **6b**
Toys 'R' Us **8**
Transamerica **17a**
Travelers **17b**
Tribune **20b**
Trinity Industries **23c**
Trinova **15a**
TRW **5**
Tyco Toys **14d**
Tyson Foods **10b**

U

U. S. Bancorp **3d**
U. S. Healthcare **12c**
U. S. Home **13b**
U. S. Shoe **8**
U. S. Surgical **12d**
UAL **23a**
UJB Financial **3a**
Ultramar **11b**
Unifi **15d**
Union Bank **3d**
Union Camp **19b**
Union Carbide **4**
Union Electric **24**
Union Pacific **23**
Union Texas **11b**
Unisys **18b**
United Stationers
United Technolog
Unitrin **17b**
Univar **21b**
Universal Foods **1**
Universal Health
Unocal **11b**
UNUM **17b**
Upjohn **12b**
US West **22b**
USAir Group **23**
USLife **17b**
UST **6e**
USX-Marathon **1**
USX-U. S Steel **16**
UtiliCorp United **2**

V

Valero Energy **11**
Valspar **13a**
Value City **8**
Varian Associates
Varity **15c**
Venture Stores **8**
VF **6a**
Viacom **20a**
Village Super Ma
VLSI Technology **9**
Volt Info Sciences
Vons **10c**
Vulcan Materials
VWR **21b**

W

Waban **8**
Wachovia **3c**
Wal-Mart Stores **8**
Walgreen **12a**
Wallace Compute
Warner-Lambert **1**
Washington Post **2**
Webb (Del) **13b**
Weirton Steel **16b**
Weis Markets **10c**
Wellman **4**
WellPoint Health
Wells Fargo **3d**
Western Digital **1**
Westinghouse Ele
Westvaco **19b**
Weyerhaeuser **19**
Wheeling-Pittsburg
Whirlpool **6b**
Whitman **5**
Wicor **24b**
Willamette Industri
Willcox & Gibbs **2**
Williams **24b**
Witco **4**
WMX Technologie
Woolworth **8**
Worthington Inds.
WPL Holdings **24**
Wrigley (Wm) Jr.
Wyle Laboratories

XYZ

Xerox **18b**
Yellow **23d**
York International **1**
Younkers **8**
Zenith Electronics **6**
Zurn Industries **24**

Footnotes on page51

Yep. Flatter than
yesterday's root beer.

No. Everyone's fine.

In weather like this?

Sooner is better.

Ten minutes flat.
Very funny.

When you want the security of a cellular phone, you need the quality of a Motorola.

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MOTOROLA

FLOPS

TOO MANY NEW PRODUCTS FAIL. HERE'S WHY—AND HOW TO DO BETTER

Egg rolls for dinner: What a great idea! That was the thinking behind the decisions to launch a line of La Choy frozen egg rolls in 1988. Not measly little appetizer egg rolls, mind you: What managers for the Hunt-Wesson Inc. brand envisioned were big, meaty egg rolls that a consumer would happily eat as a main course. The egg roll offensive would complement another new idea, the Fresh and Lite line of low-fat frozen Chinese entrées. After all, La Choy was a well-known brand name, thanks to its canned goods; ethnic cuisine was soaring in popularity; so were frozen meals. What could go wrong?

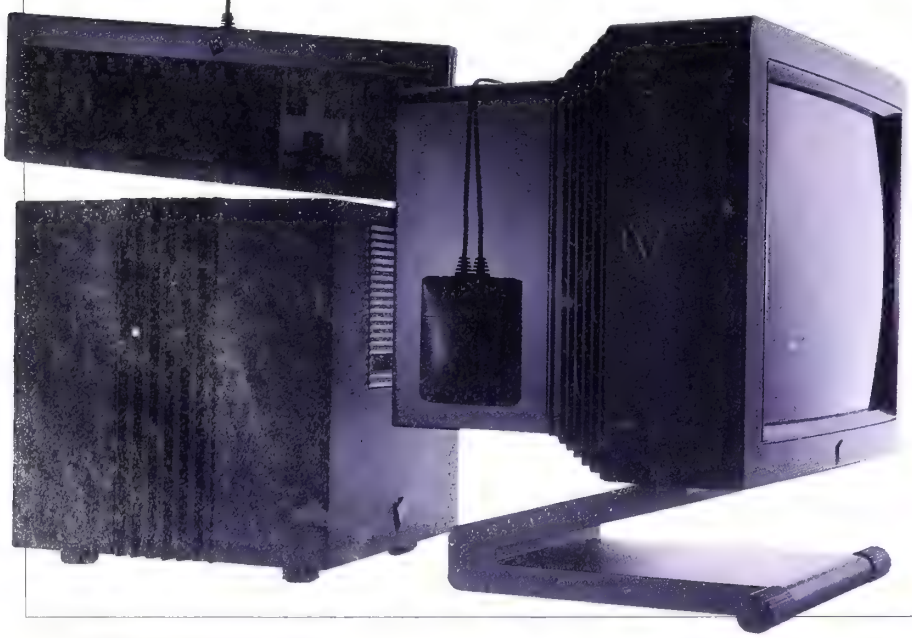
BIC PERFUME
THE FEMININE FRAGRANCE WAS MARKETED LIKE A CIGARETTE LIGHTER

Plenty, as La Choy discovered when it rolled out its egg rolls into the East and Midwest. For starters, they couldn't be microwaved, because the shells got soggy. And it took a very long 30 minutes to heat these giant entrées in an oven. The other Fresh and Lite products didn't set the world on fire, either. For one thing, there was the name. "It sounded more like a feminine-hygiene product," says Linda Krakowsky, an ad executive who worked on the campaign. "And it was hard to say it was fresh anyway, because it was frozen." Two years later, La Choy executives pulled the plug on both the monster egg rolls and the Fresh and Lite line: Today they say they never had the market clout to make these products succeed.

In the long and inglorious history of new-product flops, La Choy is not alone. Put in the context of such historic screwups as Ford Motor Co.'s (estimated losses: $250 million), VideoDisc player ($500 million) Time Inc.'s *TV-Cable Week* ($47 mill few soggy egg rolls don't seem al catastrophic. Producing flops is p doing business in every industry, consumer products,

where relentless competition for store shelf space drives many new products to quick extinctio electronics, where rapid technol change dooms many newcomers after a promising start. Remembe Osborne portable computer?

IS FAILURE ESSENTIAL? And the flop near-flops just keep coming. Amor cent events: Dell Computer Corp mits it messed up its notebook la Toyota Motor Corp. records disap ing initial sales for its much-her T100 pickup truck. Coca-Cola Co. s gles to succeed with what looked nifty idea—a tiny soda fountain it designed for office use.



NeXT COMPUTER

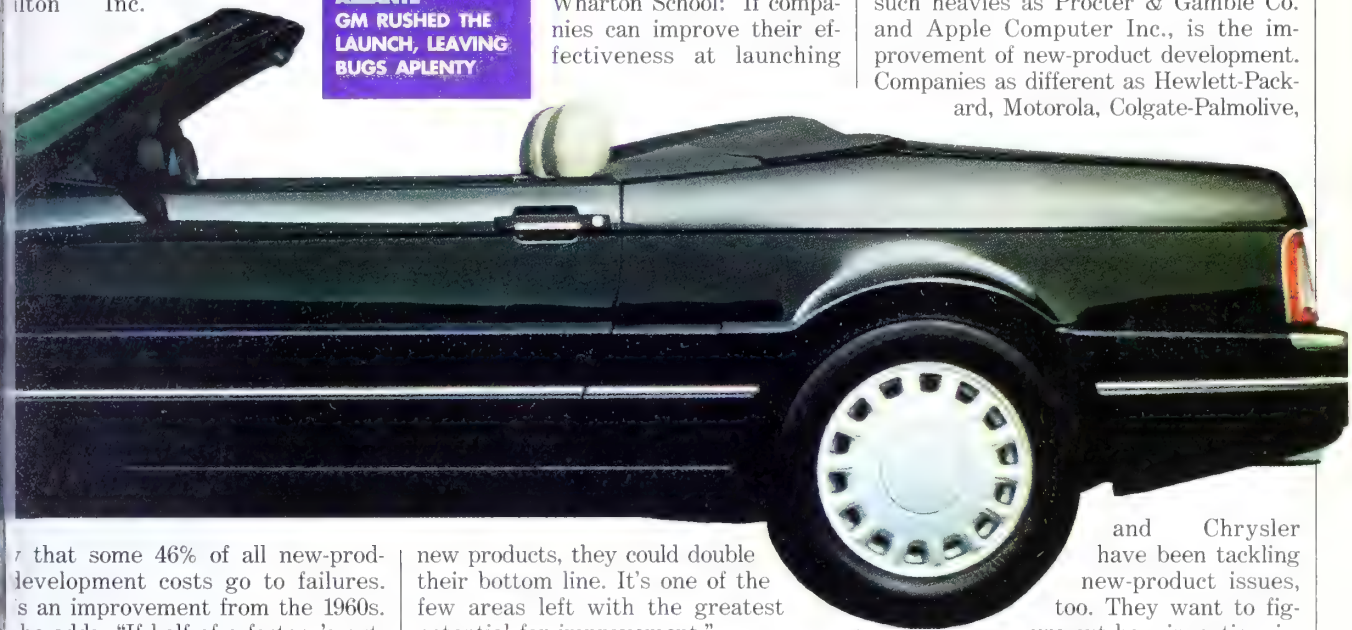
Overall, new-product b ground is a s of awful carn Chicago co tants Kuczm & Associates

ed the success for 11,000 new ıcts launched by manufacturing, ce, and consu- ›roducts compa- They found only a little more half—56%—of all prod- that actually get launched are ›n the market five years later. her studies peg the long-term suc- rate of new products closer to 65%. everyone agrees that most ideas r even make it into test markets. ›anies had to cook up 13 new-prod- deas before they came up with a er, according to Kuczmarski. "Clear- l is not well," says Robert G. Coop- professor of marketing at McMas- University in Hamilton, Ont. A alist in new-product devel- nt, he cites a Booz Allen & ilton Inc.

FROM CAMPBELL AND COLGATE

enormously successful at wringing operational defects out of the system," says William BonDurant, a top marketing executive at Hewlett-Packard Co. "But then you look at failure rates for new products, and they haven't changed much in 25 years. There has to be a way to drive that rate down." Adds Yoram Wind, a professor of marketing at the Wharton School: "If companies can improve their effectiveness at launching new products, they could double their bottom line. It's one of the few areas left with the greatest potential for improvement."

CADILLAC ALLANTE
GM RUSHED THE LAUNCH, LEAVING BUGS APLENTY



ı that some 46% of all new-prod- development costs go to failures. 's an improvement from the 1960s. he adds: "If half of a factory's out- ›nded up as defects, you'd shut the down."

early, too, such inefficiency ›s a tempting target for today's and hungry corpo- ns searching for to cut costs and ase productivity. U.S. companies spent the 1980s oving efficiency ›oosting quality, that now face ıs competitive es in slow- th markets, ıg the success of new prod- increasingly like one of the frontiers. "In- ry has been

To be sure, there's a school of thought, ardently advocated by some executives who devote their lives to devising new products, that insists a certain rate of failure is essential. Says Brian Swette, general manager for new business at Pepsi-Cola Co.: "If you're batting a thousand with all your new products, you're doing something wrong." A perfect new-product record, he argues, means a company isn't taking necessary risks to develop new markets. Then, too, failure often lays the groundwork for a future success. The classic example: The not-very-sticky glue that technicians at 3M Co. turned into Post-It notes.

DRY BEER
DESPITE MASSIVE ADVERTISING, BEER MAKERS DIDN'T SAY WHAT IT WAS

Yet that philosophical view isn't keeping companies from taking a much sterner attitude toward new-product development in a broad array of industries. The No. 1 priority at the Marketing Science Institute, a research group backed by such heavies as Procter & Gamble Co. and Apple Computer Inc., is the improvement of new-product development. Companies as different as Hewlett-Packard, Motorola, Colgate-Palmolive, and Chrysler have been tackling new-product issues, too. They want to figure out how invention, in-house teamwork, and customer involvement will compress development time, unleash a flood of successful new products—and keep flops at bay.

PRODUCT CHAMPIONS. It's a riddle that requires a company to understand not just its markets and customers, but itself. Sure, says Abbie Griffin, professor of marketing and production management at the University of Chicago, product development means figuring out what customers want and developing an offering to meet that need. But, she adds, it also means considering what a company is best at, how it goes about the business of devising and marketing new products, and the path those products must follow as they move through the company's infrastructure.

And the more executives, academics, and consultants delve into what it takes to make a success, the more hurdles

TOP TO BOTTOM: PHOTOGRAPHS BY MICHAEL GEFENLAB (SOUP & SOAP); PAUL CHIP STEN-SEN (BEER)

they discover a new product must overcome. When executives at Hewlett-Packard's Medical Products Group studied 10 of their new-product failures along with 10 of their successes, they were surprised to identify a total of 14 essential tasks that determined which products worked and which didn't. The steps covered a wide range of corporate skills. Among them: figuring out which new products play to a company's core strengths, understanding how a new product should be sold, and getting an early fix on a project's costs. "We found if you missed on just 2 of the 14 factors, you failed with your product," says Mark Halloran, chief of research and development. Other studies have pinpointed the same need to master a wide range of disciplines in order to achieve success (table).

So what are the steps to new-product nirvana?

For starters, a new product must satisfy a customer's needs, not a manager's. Every new product needs a champion, of course—someone who believes in an idea and is willing to take risks to see that idea grow. But advocacy can easily turn into self-deception, dedication into wishful thinking. That's a painful lesson Steve Jobs learned. The visionary founder of Apple Computer tried to repeat his success at NeXT Inc., the start-up company that developed the sleek, black NeXT desktop computer. After burning through $200 million of investment funds, NeXT stopped shipping the $10,000 computer in February of this year. It's now concentrating on its far more promising software.

What happened? As Richard A. Page, NeXT co-founder and former hardware vice-president, put it a few months ago, when he quit: "The customers know what they want." And what they don't. For starters, they did not want Jobs's optical drive instead of the usual floppy drive. The new feature made it tough to switch work from a PC to NeXT. Even after a floppy drive was added, the machine itself remained slow, and there wasn't much software available to run on it.

TURNING MORE NEW PRODUCTS INTO HITS LOOKS LIKE THE FINAL FRONTIER. COMPANIES COULD, SAYS WHARTON'S WIND, "DOUBLE THE BOTTOM LINE"

True, the machine had nifty features, such as hi-fi sound. But even though Jobs tried to attract various kinds of customers, NeXT never overcame its essential, customer-hostile flaws. Students found it too expensive, even after discounts. Engineers preferred desktop workstations from Sun Microsystems Inc. Although he has dropped it, Jobs insists that the NeXT computer was the right product: It was just too late to compete with the more powerful m chines already out there. Yet if he d listened to customers and gone w more standard technology earlier on, a alysts say, he might have had a cha

BLIND TO THE SIGNS. Jobs was ri about one thing: It's important to ge market swiftly. But it's even more portant to get quality and pricing ri the first time—even if that means de That's the painful lesson Cadillac lear with its Allanté. When General Mot Corp. launched the model with gr expectations in 1987, Cadillac manag had hoped that the $54,4 coupe would bestow aura of sexy Euro-style on the division's whole and expand its custom base to the younger b ers being lured away BMW and Mercedes-Benz didn't exactly work that way: The Alla went out of production July 16, the tim of a too hasty launch and a failure offer the right mix of price, quality, features to finicky consumers.

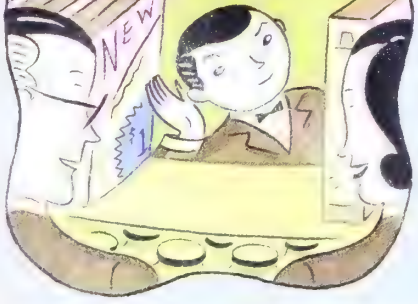
For starters, the car, with its 1 horsepower engine, was underpowe compared with foreign rivals. The bo handcrafted at the Pininfarina works in Turin, Italy, was attractive, but especially distinctive or well made. T roof leaked, and squeaks and wind no marred the luxury-car hush.

These were all clear signs that car's handlers should have waited a ironed out the bugs. But signs w

GETTING SMART ABOUT NEW PRODUCTS

How a company can improve its success rate in product launches

1 ASK YOUR CUSTOMERS
Don't launch a product just because the engineering department loves a new technology. Consult users at every step, from idea stage to rollout.



2 SET REALISTIC GOALS
A new product might be sure to produce $20 million in sales. So don't make it a loser by aiming for $40 million.

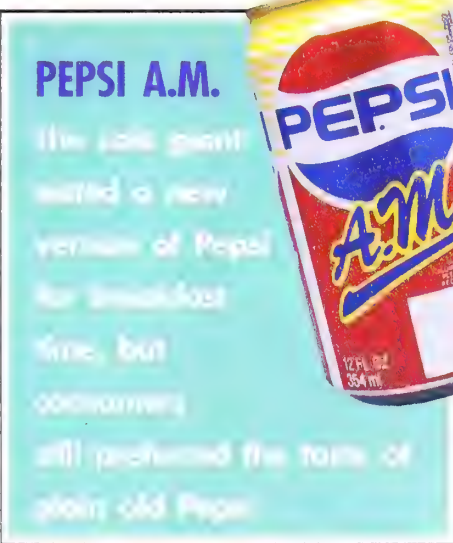
3 BREAK DOWN WALLS
Passing off a new product from o partment to the next risks potentially disc foulups. Instead, have research, marketin manufacturing work together from the st

if they're heeded. One executive worked on the Allanté later on says Cadillac couldn't bring itself to de- he launch. "They had made a big a about the introduction of this car, when the car wasn't ready, they want to make the hard choice and back," he says. The result was a car nall and expensive for core Cadillac rs, but not really good enough to import buyers. No wonder Cadil- old fewer than half the expected Allantés in the 1987 model year. it never sold even half its goal of cars in subsequent years.

y the time GM decided to pull the Allanté (now priced at $61,675) finally become the ultrasmooth, performance luxury coupe it was ally intended to be. Cadillac had l the 295-horsepower multivalve forthstar engine and an electronical- ntrolled transmission. But buyers thoroughly confused. It was five too late.

ding a different view, Cadillac's gen- manager, John O. Grettenberger, "The car was a victim of econom- ot a failure." He says a financially ped GM finally had to focus on its models. Allanté's initial problems, ays, were not a result of haste. were normal for a new venture narket that Cadillac was just enter- And although he "would have liked e it sell in greater numbers," Gret- rger says the Allanté taught Cadil- aluable lessons in marketing and ology that have made the Seville ng Sedan a success.

course, if Allanté had gone through a more successful launch, it might have had a longer life. But even getting the new product right from the start is no guarantee of success: It must still be sold in the right way, through the right channels. A study by Cooper of McMaster shows that new-product managers double their chances of success when they successfully match a new product with the right sales force and distribution system.



"EMOTIONAL SELL." Huffy Corp, for example, the successful $700 million bike maker, did careful research before it launched a new bicycle it dubbed the Cross Sport, a combination of the sturdy mountain bike popular with teenagers and the thin-framed, nimbler racing bike. Huffy conducted two separate series of market focus groups in shopping malls across the country, where randomly selected children and adults viewed the bikes and ranked them. The bikes met with shoppers' approval. So far, so good. In the summer of 1991, Cross Sports were shipped out to mass retailers, such as the Kmart and Toys 'R' Us, chains, where Huffy already did most of its business.

That was the mistake.

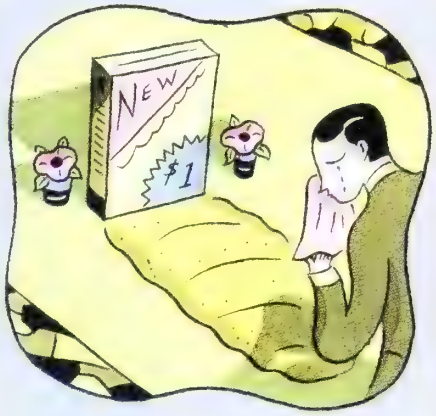
As Richard L. Molen, Huffy president and chief executive, explains the company's slipup, the researchers missed one key piece of information. These special, hybrid bikes, aimed at adults and, at $159, priced 15% higher than other Huffy bikes, needed individual sales attention by the sort of knowledgeable salespeople who work only in bike specialty shops. Instead, Huffy's Cross Sports were supposed to be sold by the harried general salespeople at mass retailers such as Kmart. Result: "It was a $5 million mistake," says Molen. By 1992, the company had slashed Cross Sport production 75%, and recorded an earnings drop of 30%.

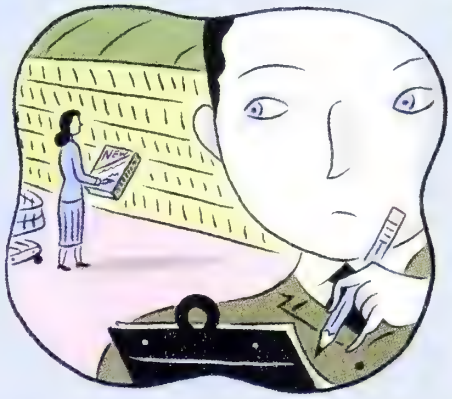
A corollary of "Know thy sales channel" is another rule: Don't sell a product just because you need something new to pump through the sales channel you have already mastered. In 1989, BIC Corp. introduced a small $5 glass flask of perfume, to be sold in the supermarkets and drugstore chains where BIC had so much distribution clout. After much hoopla, BIC sold $5.6 million worth of Parfum BIC in the U. S. before withdrawing it from stores in the first half of 1990. The cost: about $11 million.

The problem: Perfume is hardly as

5 WATCH THOSE TESTS

A test market may succeed just because consumers are sampling a new product out of curiosity. Don't get carried away by initial results. Test long enough to get a real sense of a product's potential.





CREATE GATEWAYS

Don't let a new product gather erous momentum. At each stage of duct's development, make sure it specific criteria of manufacturing ity, customer acceptance, sales sup- and budget planning.

6 DO YOUR POST-MORTEMS

Managers tend to run away from their flops. Don't. Formally review what went wrong and apply those lessons to the next launch. Reward managers who learn from mistakes.

(TOP) PHOTOGRAPH BY MICHAEL GREENLAR

disposable and utilitarian as a bag of razors. Says Mark A. Laracy, president of Parfums de Coeur Ltd., in Darien, Conn., which does about $70 million a year by mass marketing knockoffs of pricey scents: "Fragrance is an emotional sell to women. But the BIC package wasn't feminine. It looked like a cigarette lighter."

TOO-SUBTLE QUAFF. Even if the product is fine and its distribution channel is right, though, it may still come to grief if consumers don't understand its benefits. Three years ago, for example, brewers fell in love with dry beer, quaffs that were supposed to have a cleaner finish. Many thought dry beer could be the boost their industry needed. Anheuser-Busch Cos., Coors Co., and a clutch of smaller foreign brewers shipped 4.6 million barrels of dry beer in 1990.

But by 1992, shipments had fallen to 3.7 million barrels—a minuscule drop of the industry's 197 million-barrel total—and brewers will be lucky to do even that much this year. Pretty sorry returns on the $40 million-plus spent in advertising for the category. Coors Vice-Chairman Peter H. Coors figures dry beer appeals to only 2% of all beer drinkers. "At the time, it seemed like an intelligent decision," he says. "Knowing what we do now, we probably wouldn't have gone with it."

What Coors knows now is that consumers, who usually only spend a few seconds in a store or bar choosing a beer—or any product—are not going to take the time needed to understand a too-subtle product like dry beer. As marketing consultant Jack Trout puts it, "Nobody can figure out what the hell dry beer is. The opposite of wet beer? It's never been explained." And it probably never can be.

Numerous as the pitfalls are, it's possible for companies to avoid them. But improving the odds in new-product development often takes some fundamental rethinking of the way a company approaches its markets and manages its own operations. Chrysler in the 1980s, for example, was a textbook case of how not to devise new products. Ignoring the need for continuing innovation, the carmaker relied throughout the decade on the K-car platform it introduced in 1981. Such models as a too-narrow New Yorker sedan were launched and flopped. In addition, Chairman Lee A. Iacocca used his influence the wrong way, walking into Chrysler's styling studios and ordering up more chrome or opera dows with a wave of the hand.

As sales flagged in 1989, Chry President Robert A. Lutz finally vinced top executives that the com had to change its ways. So Lutz François J. Castaing, Chrysler's neering chief, threw out their old, partmentalized appr to new-product deve ment, in which a pr would pass from rese to engineering to m facturing, and finally to marketing. Instead rowing f Japanese pra es, cross-func al teams of e neers, ma researchers, r keters, stylists, manufacturing e neers began w ing together to sign and build models. The team proach has chop by 40% the tim takes to develop a car or truck. One portant result: the LH line of sedans.

SIX STAGES. Other c panies are also us team approaches to h their new-product proc es. Colgate-Palmolive had a string of new-pr uct flops in the 19 most notably Fab 1 S The product, a slug of tergent, softener and antistatic ingredient i soluble bag, was s posed to save c sumers time hassle, but inst it irritated us who couldn't just the mix suit their o needs. Si 1989, Colgate overhauled new-product p cess to concentr cross-functional teams on far few product ideas speed up global r outs of the most pr ising products.

Now, only about 20% of ideas mak to prototype, down from around 5 And each idea must meet specific cr ria at six different stages that lead fr development to achieving a commerc

EDSEL AND FRIENDS: TEN WORLD-CLASS FLOPS

FORD'S EDSEL

DUPONT'S CORFAM

POLAROID'S POLAVISION

UNITED ARTISTS' *HEAVEN'S GATE*

RCA'S VIDEODISC

TIME'S *TV-CABLE WEEK*

IBM'S PCjr

NEW COKE

R.J. REYNOLDS' PREMIER

NUTRASWEET'S SIMPLESSE

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Millions of lower-income families have the desire to buy a home. Many are ready now. But they may be intimidated by the buying process. Uncertain how the system works. Or blocked by discrimination. Others just need a little help getting started. They may need information on how mortgage lenders evaluate employment records. Or advice on establishing a credit history.

These are problems the housing industry urgently needs to address.

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Together we created an outreach program to assist lower-income families who want to buy homes. We produced a guide to help them decide if they're ready. And we're matching up families with professionals in their area who can help them with the home-buying process.

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ly viable product. While Colgate hasn't yet won a reputation as a new-products runaway winner, its latest introductions, such as Precision toothbrush and Stand-up toothpaste, have been successes.

Other companies have learned to get back to their core strengths. Campbell Soup Co. dismayed consumers and stockholders alike in the 1980s by pouring out almost 160 new products a year, with a success rate of at most 20%. "We didn't stay close to home," says former North and South American Div. President Herb Baum. The failures included such notable bobbles as Campbell's Fresh Chef line of fresh salads and soups, which had a shelf life of a week. The company was constantly misjudging which dishes would sell and which wouldn't. "We never knew what to make," says Baum. The result was spoiled food and irritated supermarket owners.

Now Campbell has cut back new products 20%, to around 120 a year. And those are mostly in areas it knows best, such as canned soups, sauces, and baked goods. When the company ventures into new areas, it is with something such as Pepperidge Farm canned gravy, which uses technologies Campbell understands and brand names that it has already established.

INSPIRING CASES. The likes of Chrysler, Colgate, and Campbell have plenty of incentive to improve the odds for their new offerings: There appears to be a strong correlation between new-product success and a company's health. According to Thomas P. Hustad, editor of the *Journal of Product Innovation Management*, the companies that lead their industries in profitability and sales growth get 49% of their revenues from products developed in the past five years. The least successful get only 11% of sales from new products.

There are also plenty of specific cases to inspire and terrify. Gillette Co.'s stock has soared since it introduced its new Sensor razor. IBM's has floundered since it amply demonstrated its ineptitude at creating new product lines that pay. But IBM has also shown how it is possible to change: Its small ThinkPad computer is a big new-product success.

Whether it's frozen egg rolls or microchips, the message is clear: A company cannot avoid every flop. But if it learns from its mistakes, it can surely flop a lot less often. And understanding failure is clearly a key to success in this ferociously competitive decade.

By Christopher Power in New York, with Kathleen Kerwin in Detroit, Ronald Grover in Los Angeles, Keith Alexander in Pittsburgh, Robert D. Hof in San Francisco, and bureau reports

A SMITHSONIAN FOR STINKERS

Ever wonder where new products go when they die? Some consumer-marketing giants, most notably Procter & Gamble Co., maintain archives of old products. Most companies, though, prefer to forget and move on.

But Robert McMath won't let them. For over 30 years, McMath, now 62, has been scouring trade shows and supermarkets for new consumer products. He gathers samples of winners and stinkers alike for his own collection, the New Products Showcase and Learning Center, located in Ithaca, N.Y. The entrance to the center could well bear the motto: 'Look upon these works, ye marketers, and despair.' Jammed onto steel shelving inside a concrete-floored warehouse, the more than 80,000 items contain innumerable examples of marketing's has-beens, also-rans, and never-weres.

McMATH AND HIS MONSTROSITIES: BOMBS FROM SHAMPOOS TO VIRUCIDAL TISSUE

FLOPSHOUSE. As you would expect of a man who owns over 5,500 different kinds of beverages and 3,600 shampoos and conditioners, the garrulous McMath has pondered the lessons of them all. On a shelf near the entrance sits a pack of R. J. Reynolds' Prer smokeless cigarettes, which has ne made it out of test market. The p lem, according to McMath: "Only smokers would like the product. Sn ers like being wreathed in smo Nearby is a box of tissues bearing curious name Avert. They were vir dal tissues that were treated to your cold germs when you blew y nose. A worthy goal, says McM But alas: "People weren't sure w a virucidal tissue was. It scared hell out of them."

What's that box labeled Wine Dine? It turns ou be the yupscale swer to Hambur Helper, noodles an sauce mix bund with a tiny bottle Chianti. Sad to the labeling di make it clear that Chianti in that bo was salty cook wine. Consum thought they bought a little for dinner. When t discovered their er they took their w ing and dining e where. Ill-conside names also hurt er products. That cludes the shamp dubbed Look of E termilk and Touch Yogurt, which di exactly promise good hair day.

McMath's collection is good laughs and shudders, but there's a rious side as well. A former Colga Palmolive Co. executive, McMath th days consults for companies that w to review past efforts in a given pr uct category. If you want to launc new instant coffee, for example, M Math can trot out dozens of rela products, both successful and uns cessful, from bottles of coffee sy to newfangled coffee bags (wh haven't exactly taken the market storm). To today's brand manage it's comforting to know there's a pl where marketing's fallen can go rest peace.

By Christopher Power in Ithaca, N

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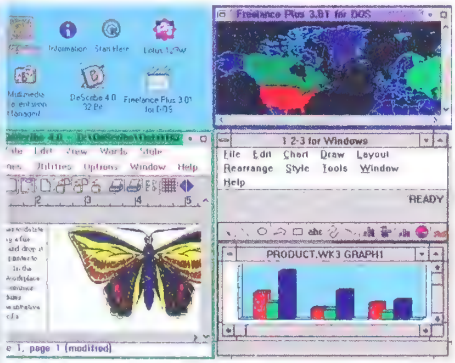

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STRATEGIES

THE REMAKING OF AN OIL GIANT, 1993

Salinas' risky reforms of Pemex seem to be paying off for Mexico

At Chi-Chi's restaurant in steamy Ciudad del Carmen, on the Gulf of Mexico's southern coast, the country music is blaring. Blond-haired drilling engineers are gulping down plates of guacamole and chiles rellenos and calling for more beer in sign language, since they don't speak Spanish. Recently transferred from Kazakhstan and China, these American oilmen are flocking to Mexico to take part in what's becoming the world's latest oil boom.

It's the first time so many gringos have been seen in the Mexican oil patch since the early 1970s, when they were last allowed to drill under contract. And it's the most welcome they have been since President Lázaro Cárdenas nationalized the Mexican oil industry.

NEW DRILL. What's driving this radical change? Petróleos Mexicanos, the state oil monopoly, has new marching orders from President Carlos Salinas de Gortari: Start acting like a modern oil corporation. That's a big order for any company, especially a state-owned behemoth such as Pemex, which was created more to provide jobs than to make money. Insiders say obstacles—from suffer-no-change nationalists to money-skimming bureaucrats—may make modernizing Latin America's biggest oil producer nearly impossible.

Pemex was created in 1938, when Mexico retook control of its oil industry from American and British wildcatters who struck pay dirt at the turn of the century. No one seemed to care if the company was well-run, as long as it provided a social safety net for a bloated work force and poured 90% of its profits into the national Treasury. Pemex earned $10.8 billion in 1992, roughly the same as it did in 1991. Revenues rose 10% last year to $21.3 billion.

That laissez-faire attitude changed with Salinas. A month after he took office in December, 1988, he had legendary oil union leader Joaquín Hernández Galicia, nicknamed "La Quina," arrested on weapons and murder charges that put him in jail for 35 years. La Quina's union had hog-tied Pemex for decades, forcing the hiring of tens of thousands more workers than necessary. The union had amassed a huge fortune from a 2% cut of all oil contracts. In Salinas' plan, crippling the union was an important step in turning Pemex around.

Salinas also called in international consultants and ordered Pemex officials to start monitoring the company's internal finances. Next, Pemex began massive layoffs. To date, the work force has been slashed by 94,000, or 44% of the total payroll. It will drop by an additional 12,000 later this year. Pemex also rushed to become more nimble financially. In 1992, the company tapped the European bond market for the first time since the foreign debt crisis, issuing $200 mil in Eurobonds. In all, Pemex raised al $2.5 billion last year. Officials are ho to issue U. S. Yankee bonds next y and are hustling to bring Pemex' bo in line with U. S. accounting pr dures—no small feat for a company didn't even make its annual report a able to the public until three years

The next big change at Pemex not in Salinas' plans. In April, 199 massive explosion rocked the city Guadalajara, killing at least 200 pe and leveling dozens of city blocks. G line from a Pemex pipeline had lea into sewer lines. Residents had c plained of gasoline smells for days—to avail. The tragedy emphasized that P ex was an unwieldy bureaucracy, countable to no one.

MODEST GAINS. The disaster gave S nas the opportunity to shake up the giant even more. He announced a ma restructuring, creating four subsid ies, each responsible for its own bud and planning: exploration and pro tion, refining, gas and basic petroche cals, and secondary petrochemicals.

So far, officials say the Salinas

KEITH DANNEMILLER-SABA

s are paying off. Finance Chief Er- Marcos predicts a 15.3% drop in iting costs this year—only half of e to layoffs. Productivity is up: per employee are $3.60 per ton, up $2.10 in 1988. Thanks to more effi- drilling, it now costs Pemex $3.16 arrel to add new reserves; it costs anies elsewhere from $5 to $7. "For irst time, we're comparing costs nit and costs per employee," Mar- ays. "We never used to reveal these es—partly because it didn't pay and y because we were embarrassed."

t if Salinas' bid to remake Pemex is it is also fraught with political risk. e touchstone of nationalism, oil is ined in Mexico's constitution as the rty of the state. If Salinas takes any liberties with Pemex, the rul- nstitutional Revolutionary Party pay the price in presidential elec- next year. At the same time, fail- transform Pemex into an efficient mpany with strong reserves would nuch larger loss in the long run for o's energy independence, foreign nge earnings, and sovereignty.

ere's little question that foreign anies can help. In 1991, Houston- Triton Engineering Services Co. leted Mexico's first privately drilled, offshore, turnkey well in 127 days—half the time Pemex takes—and at half the cost. Now, turnkey contractors are drilling nearly half of Mexico's exploratory wells.

Salinas insists that "ownership and control of the oil will remain in the hands of the Mexican people." But that still leaves plenty of room for foreigners to participate in developing Pemex' oil potential. For example, a consortium led by San Antonio's Valero Energy Corp. has won permission to build, own, and operate a $350 million gasoline-additives facility in Veracruz, the first time the private sector has been allowed to encroach on Pemex' exclusive control of refining. It's just one of a growing number of ventures undertaken for Pemex by foreign oil companies (table).

For Pemex, it's a matter of survival. Analysts warn that Mexico could become a net importer of oil and natural gas by 2000 if investment in capital-starved Pemex isn't forthcoming soon. In the 1980s, investment in exploration and refining dropped by nearly 80%. Now, to keep pace with Mexico's 5%-a-year increase in oil consumption, Pemex estimates it needs $23 billion over five years just to maintain reserves.

For American companies, the new, if limited, access to Mexico is figuring in long-range plans for North America. Just as the auto, agriculture, and retail industries are beginning to integrate along North American lines, so is the energy industry. Energy companies already are seeing windfalls as Mexico, the U. S., and Canada negotiate the free-trade agreement. Mexico is under pressure to upgrade its aging refineries and move toward cleaner-burning fuels, especially to power electricity plants and factories along the 2,000-mile border. Pemex has boosted its purchase of cheaper natural gas imports 40-fold over the past four years. "The future of our company is in Mexico," says Bill Greehey, chairman and chief executive officer of Valero, a refiner and natural-gas pipeline operator.

IN THE WINGS. Of course, what the oil majors really want is to explore for oil, take a percentage of the find, and help manage Mexico's vast fields. They lobbied heavily for such privileges during negotiations over the North American Free Trade Agreement last year, but Mexico held firm. Hopeful that Mexico will eventually soften, they are waiting in the wings—and snapping up whatever peripheral business comes along. "The door may not have opened in the area we wanted, but other doors have opened, and you would be crazy not to take advantage of them," says Floyd W. Boyd Jr., president and general manager of Amoco Mexico Inc. Amoco has been doing geological and geophysical evaluations for Pemex for a year on a project-by-project basis. And Texaco Inc. is providing Pemex with the basic engineering to desulfurize fuel oils for use in polluted areas such as Mexico City, a project financed by the Japanese Overseas Development Cooperation Corp.

Many Mexicans have trouble allaying their mistrust of foreign, especially American, ambitions. That concern is fueled by such studies as one issued recently by the Heritage Foundation, urging Mexico to privatize Pemex and all of its oil assets and use the estimated $148 billion in proceeds to retire forever the country's foreign debt.

Such unsolicited advice helps ensure that Mexico will never go as far as Argentina did last month when it sold off 45% of YPF, the state oil company, to local and foreign investors for $3 billion. And it may be years before Mexican nationalism eases up enough to permit foreign companies to help develop oil fields, as Venezuela has done. Still, the oilmen who gather at Chi-Chi's in Ciudad del Carmen figure that the current boom will last long beyond next year's presidential elections—and perhaps long enough for them to learn the Spanish words for "explore" and even "profit."

By Geri Smith in Ciudad del Carmen, Mexico

WHEELS OF CHANGE: MEXICAN ACCESS IS KEY TO U.S. OILMEN'S PLANS

FOREIGNERS TIPTOE INTO PEMEX

- Shell Oil's Deer Park (Tex.) refinery will process 150,000 barrels per day of Mexico's heavy Maya crude. Pemex paid $1 billion for a 50% stake in 1992.
- Valero Energy in San Antonio and partners are building a $350 million gasoline-additive plant in Veracruz, the first such private investment.
- Amoco has contracts to conduct geophysical evaluations, and Texaco is engineering a fuel desulfurization plant for Pemex.
- San Antonio-based Diamond Shamrock opened its first service-station Corner Store franchise in Monterrey in June. It's one of 200 stores planned with Mexican operators, skirting a ban on foreign ownership of service stations.
- Ten Mexican and foreign contractors have deals to drill 36 offshore wells in Mexico's Bay of Campeche.

DATA: PEMEX, BUSINESS WEEK

POLICY

HOT AIR ON GLOBAL WARMING

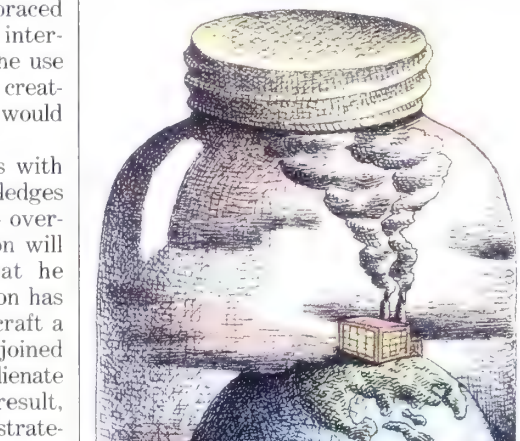
The rash of regulation industry expected won't happen—for now

President Clinton appeared to have lit a time bomb when he promised on Earth Day, Apr. 21, that the U. S. would roll back emissions of carbon dioxide and other gases that may cause global warming—and that he would unveil a plan to do so by early August. Some industry groups braced for the worst: reams of red tape, international regulations, or limits on the use of fossil fuels—the chief culprits in creating the gases. In short, rules that would be costly and hard to implement.

They needn't have worried. As with some other initiatives—including pledges to halve the budget deficit and to overhaul health care this year—Clinton will be hard-pressed to deliver what he promised. In typical fashion, Clinton has given his aides too little time to craft a policy. And staffers have been enjoined from taking measures that could alienate powerful interest groups. As a result, says one government official, the strategy Clinton plans to unveil before an international meeting on climate change in Geneva on Aug. 16 will be a "mediocre" first step. Indeed, an initial draft of the plan obtained by BUSINESS WEEK indicates that the cuts will fall short of Clinton's goals.

NO TEETH. Global warming is an incendiary issue in part because the scientific evidence for it is inconclusive. Still, most climate experts think that emissions of carbon dioxide and other gases help trap heat in the atmosphere. That could eventually warm the earth's climate and alter weather patterns, with potentially disastrous effects. In an international agreement on climate change adopted last year at the Earth Summit in Rio de Janeiro, countries agreed that the best way to avoid this would be to cut back emissions from burning carbon-based fuels.

In Rio, however, the Bush Administration was instrumental in keeping goals and timetables out of the pact.



Clinton has reversed that stance by committing the U. S. to roll back emissions by the year 2000 to 1990 levels. That would entail cutting projected output of 1.7 billion metric tons of greenhouse gases by 200 million metric tons by 2000—a gap equal to the emissions of nearly two-thirds of all U. S. motor vehicles. The largest single chunk—25 mil tons—was to come from conservatio spired by the Administration's prop tax on the heat content of fuel. But gress has scrapped the BTU tax in f of a small gasoline tax, which will only a 5-million-ton cut, and refuse fund $15.3 million in other energy-sa programs. U. S. efforts now in place yield only half the reductions that ton promised (table).

To close the gap, the Administra is expected to rely on low-cost, v tary measures that encourage indivi and companies to cut energy use. I on the table include allowing buyer energy-efficient homes to borrow m supporting ventures that will dev renewable-energy technologies; and ing indirect pressure to get companie cut greenhouse gases, such as as them to report their emissions v tarily. Needless to say, business fa such measures. "Voluntary program fer more flexibility," says John Sh executive director of the Global Cli Coalition, an industry group.

The Administration's own draft o $672 million plan concedes a drawbac this approach: It would cut emiss by only 50 million to 70 million m tons. A White House official insists eventually the U. S. will have a that meets Clinton's goals.

Some economists, however, argue voluntary measures will never yield hoped-for cuts unless energy prices "If it made economic sense to do t things," says Warwick J. McKibbin, ior fellow at the Brookings Institutio Washington, "people would already doing them." Economists insist meeting the year 2000 target will quire sterner action: probably a ta the carbon content of fuels, which w lead to less coal-burning. But a $15- ton carbon tax isn't feasible politic now nor is raising auto fuel-econ standards from their current 27.5 m per gallon. The voluntary measu counters the White House official, aimed at removing barriers to conse tion, such as lack of information on to cut residential and commercial en

CURBING THE GREENHOUSE EFFECT

Actions already in effect will help cut U.S. emissions of greenhouse gas But they still leave a gap of 100 million metric tons that must be closed.

ANNUAL REDUCTIONS MILLIONS OF METRIC TONS OF CARBON EQUIVALENT	THE ENERGY POLICY ACT	GASOLINE TAX	EPA'S GREEN PROGRAMS	EPA'S METHANE PROGRAMS
	Its provisions, including enforcement of building codes, foster energy efficiency	A 4.3¢-per-gallon charge, which is expected to kick in by Oct. 1, 1993	Voluntary programs to encourage industry to cut energy use in facilities and products	Rules prevent methane's release from landfills, farm wastes, and gas pipelines
	40	0–5	16	32–50

DATA: ENERGY DEPT., ENVIRONMENTAL PROTECTION AGENCY

John's losing his hair. His mission: get it back.

SAP!
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ever.
hairpiece?
ever, never.
'hat John really wants
his *own* hair back.
nd now he's learned,
r male pattern
aldness,
nly *Rogaine*
as been proven
regrow hair.

Rogaine®
CAL
JTION
minoxidil 2%

Rogaine® Topical Solution (minoxidil 2%) works in part by prolonging the growth of hair, which grows in cycles. With more hairs growing longer and thicker at the same time, you may see improved scalp coverage.

Dermatologists conducted 12-month clinical tests. After 4 months, 26% of patients using *Rogaine* reported moderate to dense hair regrowth, compared with 11% of those using a placebo (a similar solution without minoxidil–the active ingredient in *Rogaine*). After 1 year, 48% of the men who continued using *Rogaine* in the study rated their regrowth as moderate to dense. Thirty-six percent reported minimal regrowth. The rest (16%) had no regrowth.

Side effects were minimal: 7% of those who used *Rogaine* had itching of the scalp. *Rogaine* should only be applied to a normal, healthy scalp (not sunburned or irritated).

Studies indicate that *at least 4 months of twice-daily treatment* with *Rogaine* are usually necessary before there is evidence of regrowth. So why not make it part of your normal routine when you wake up and go to bed, like brushing your teeth.

As you'd expect, if you are older, balding longer, or have a larger area of baldness, you may do less well.

Rogaine is a treatment, not a cure. So further progress is only possible by using it continuously. Some anecdotal reports indicate that if you stop using it, you will probably shed the newly regrown hair within a few months.

Why wait? Find out whether *Rogaine* is for you. Call **1-800-944-8802**. Today. We'll send you an informational brochure explaining all about the product and how to use it. And because only a doctor can prescribe *Rogaine*, we'll include a list of nearby *dermatologists or other doctors experienced in treating hair loss* and a $10 incentive to visit a doctor soon.

See next page for important additional information
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Rogaine

TOPICAL SOLUTION minoxidil 2%

The only product ever proven to regrow hair for male pattern baldness.

What is ROGAINE?
ROGAINE Topical Solution is a prescription medicine for use on the scalp that is used to treat a type of hair loss in men and women known as androgenetic alopecia: hair loss of the scalp vertex (top or crown of the head) in men and diffuse hair loss or thinning of the front and top of the scalp in women. ROGAINE is a topical form of minoxidil, for use on the scalp.

How effective is ROGAINE?
In men: Clinical studies with ROGAINE of over 2,300 men with male pattern baldness involving the top (vertex) of the head were conducted by physicians in 27 US medical centers. Based on patient evaluations of regrowth at the end of 4 months, 26% of the patients using ROGAINE had moderate to dense hair regrowth compared with 11% who used a placebo treatment (no active ingredient). No regrowth was reported by 41% of those using ROGAINE and 60% of those using a placebo. By the end of 1 year, 48% of those who continued to use ROGAINE rated their hair growth as moderate or better.

In women: Clinical studies with ROGAINE were conducted by physicians in 11 US medical centers involving 256 women with hair loss. Based on patient evaluations of regrowth after 32 weeks (8 months), 19% of the women using ROGAINE had at least moderate regrowth compared with 7% of those using a placebo. No regrowth was reported by 41% of the group using ROGAINE and 60% of the group using placebo.

How soon can I expect results from using ROGAINE?
Studies show that the response time to ROGAINE may differ greatly from one person to another. Some people using ROGAINE may see results faster than others; others may respond with a slower rate of hair regrowth. You should not expect visible regrowth in less than 4 months.

How long do I need to use ROGAINE?
ROGAINE is a hair-loss treatment, not a cure. If you have new hair growth, you will need to continue using ROGAINE to keep or increase hair regrowth. If you do not begin to show new hair growth with ROGAINE after a reasonable period of time (at least 4 months), your doctor may advise you to discontinue using ROGAINE.

What happens if I stop using ROGAINE? Will I keep the new hair?
Probably not. People have reported that new hair growth was shed after they stopped using ROGAINE.

How much ROGAINE should I use?
You should apply a 1-mL dose of ROGAINE twice a day to your clean dry scalp, once in the morning and once at night before bedtime. Wash your hands after use if your fingers are used to apply ROGAINE. ROGAINE must remain on the scalp for at least 4 hours to ensure penetration into the scalp. Do not wash your hair for at least 4 hours after applying it. If you wash your hair before applying ROGAINE, be sure your scalp and hair are dry when you apply it. *Please refer to the Instructions for Use* in the package.

What if I miss a dose or forget to use ROGAINE?
Do not try to make up for missed applications of ROGAINE. You should restart your twice-daily doses and return to your usual schedule.

What are the most common side effects reported in clinical studies with ROGAINE?
Itching and other skin irritations of the treated scalp area were the most common side effects directly linked to ROGAINE in clinical studies. About 7 of every 100 people who used ROGAINE (7%) had these complaints.

Other side effects, including light-headedness, dizziness, and headaches, were reported both by people using ROGAINE and by those using the placebo solution with no minoxidil. You should ask your doctor to discuss side effects of ROGAINE with you.

People who are extra sensitive or allergic to minoxidil, propylene glycol, or ethanol should not use ROGAINE.

ROGAINE Topical Solution contains alcohol, which could cause burning or irritation of the eyes or sensitive skin areas. If ROGAINE accidentally gets into these areas, rinse the area with large amounts of cool tap water. Contact your doctor if the irritation does not go away. If the spray applicator is used, avoid inhaling the spray.

What are some of the side effects people have reported?
ROGAINE was used by 3,857 patients (347 females) in placebo-controlled clinical trials. Except for dermatologic events (involving the skin), no individual reaction or reactions grouped by body systems appeared to be more common in the minoxidil-treated patients than in placebo-treated patients.

Dermatologic: irritant or allergic contact dermatitis—7.36%. **Respiratory:** bronchitis, upper respiratory infection, sinusitis—7.16%. **Gastrointestinal:** diarrhea, nausea, vomiting—4.33%. **Neurologic:** headache, dizziness, faintness, light-headedness—3.42%. **Musculoskeletal:** fractures, back pain, tendinitis—2.59%. **Cardiovascular:** edema, chest pain, blood pressure increases/decreases, palpitations, pulse rate increases/decreases—1.53%. **Allergic:** nonspecific allergic reactions, hives, allergic rhinitis, facial swelling, and sensitivity—1.27%. **Metabolic-Nutritional:** edema, weight gain—1.24%. **Special Senses:** conjunctivitis, ear infections, vertigo—1.17%. **Genital Tract:** prostatitis, epididymitis, vaginitis, vulvitis, vaginal discharge, itching—0.91%. **Urinary Tract:** urinary tract infections, renal calculi, urethritis—0.93%. **Endocrine:** 0.47%. **Psychiatric:** anxiety, depression, fatigue—0.36%. **Hematologic:** lymphadenopathy, thrombocytopenia—0.31%.

ROGAINE use has been monitored for up to 5 years, and there has been no change in incidence or severity of reported adverse reactions. Additional adverse events have been reported since marketing ROGAINE and include eczema, hypertrichosis (excessive hair growth), local erythema (redness), pruritus (itching), dry skin, scalp flaking, sexual dysfunction, visual disturbances, including decreased visual acuity (clarity), increase in hair loss, and alopecia (hair loss).

What are the possible side effects that could affect the heart and circulation when using ROGAINE?
Serious side effects have not been linked to ROGAINE in clinical studies. However, it is possible that they could occur if more than the recommended dose of ROGAINE was applied, because the active ingredient in ROGAINE is the same as that in minoxidil tablets. These effects appear to be dose related, that is, more effects are seen with higher doses.

Because very small amounts of minoxidil reach the blood when the recommended dose of ROGAINE is applied to the scalp, you should know about certain effects that may occur when the tablet form of minoxidil is used to treat high blood pressure. Minoxidil tablets lower blood pressure by relaxing the arteries, an effect called vasodilation. Vasodilation leads to fluid retention and faster heart rate. The following effects have occurred in some patients taking minoxidil tablets for high blood pressure:

Increased heart rate: some patients have reported that their resting heart rate increased by more than 20 beats per minute.
Salt and water retention: weight gain of more than 5 pounds in a short period of time or swelling of the face, hands, ankles, or stomach area.
Problems breathing: especially when lying down, a result of a buildup of body fluids or fluid around the heart.
Worsening or new attack of angina pectoris: brief, sudden chest pain.

When you apply ROGAINE to normal skin, very little minoxidil is absorbed. You probably will not have the possible effects caused by minoxidil tablets when you use ROGAINE. If, however, you experience any of the possible side effects listed above, stop using ROGAINE and consult your doctor. Any such effects would be most likely if ROGAINE was used on damaged or inflamed skin or in greater than recommended amounts.

In animal studies, minoxidil, in much larger amounts than would be absorbed from topical use (on skin) in people, has caused important heart-structure damage. This kind of damage has not been seen in humans given minoxidil tablets for high blood pressure at effective doses.

What factors may increase the risk of serious side effects with ROGAINE?
People with a known or suspected heart condition or a tendency for heart failure would be at particular risk if increased heart rate or fluid retention were to occur. People with these kinds of heart problems should discuss the possible risks of treatment with their doctor if they choose to use ROGAINE.

ROGAINE should be used only on the balding scalp. Using ROGAINE on other parts of the body may increase minoxidil absorption, which may increase the chances of having side effects. You should not use ROGAINE if your scalp is irritated or sunburned, and you should not use it if you are using other skin treatments on your scalp.

Can people with high blood pressure use ROGAINE?
Most people with high blood pressure, including those taking high blood pressure medicine, can use ROGAINE but should be monitored closely by their doctor. Patients taking a blood pressure medicine called guanethidine should not use ROGAINE.

Should any precautions be followed?
People who use ROGAINE should see their doctor 1 month after starting ROGAINE and at least every 6 months thereafter. Stop using ROGAINE if any of the following occur: salt and water retention, problems breathing, faster heart rate, or chest pains.

Do not use ROGAINE if you are using other drugs applied to the scalp such as corticosteroids, retinoids, petrolatum, or agents that might increase absorption through the skin. ROGAINE is for use on the scalp only. Each 1 mL of solution contains 20 mg minoxidil, and accidental ingestion could cause unwanted effects.

Are there special precautions for women?
Pregnant women and nursing mothers should not use ROGAINE. Also, its effects on women during labor and delivery are not known. Efficacy in postmenopausal women has not been studied. Studies show the use of ROGAINE will not affect menstrual cycle length, amount of flow, or duration of the menstrual period. Discontinue using ROGAINE and consult your doctor as soon as possible if your menstrual period does not occur at the expected time.

Can ROGAINE be used by children?
No, the safety and effectiveness of ROGAINE has not been tested in people under age 18.

Caution: Federal law prohibits dispensing without a prescription. You must see a doctor to receive a prescription.

Upjohn DERMATOLOGY DIVISION

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use, which the official characterize
significant impediments.

The failure to craft a more con
hensive plan could embarrass the
ministration in Geneva. The Clinto
want to draw a sharp contrast bet
Bush's approach and theirs. "This
ministration takes the threat of g
climate change very seriously," says
Pomerance, a deputy assistant secre
of state and head of the U. S. deleg
to Geneva. But unless the U. S. h
credible plan at home, it will be h
pressed to exert influence abroad.

HOME FIRES. Oddly enough, the g
commitments the U. S. is making
turn up the pressure for domestic a
The U. N. Framework Conventio
Climate Change, which will prob
take effect next year, requires coun
to devise action plans to reduce gr
house gases. As the world's largest
ducer of the gases, the U. S. is expe
to come up with a major share of
reductions.

At the Geneva meeting, meanw
there will likely be a sharp debate
what the U. S. should do to help de
oping nations keep their emission
check. Today, per-capita emission
carbon dioxide in the U. S. are near
times that of China and 25 times th
India. But the emissions of these gi
will soar as their economies grow
you don't deal with [global warm
internationally, you don't address
problems," says Joseph Goffman, se
attorney with the Environmental
fense Fund.

Some U. S. companies hope to kill
birds at once: to get credit at home
investments that cut emissions abr
New England Electric System (NES)
instance, pledged in 1991 to cut its
bon-dioxide emissions 20% below
levels, a reduction of 3 million to
year. In an effort to achieve half of
reduction, it invested $600,000 in a
project to promote forestry practice
Malaysia that could help preserve
bon-dioxide-absorbing trees. "A to
[carbon dioxide] in Massachusetts i
different than a ton in Malaysia,"
tends Dan C. Delurey, vice-presider
New England Electric. And NES sa
can cut emissions in Malaysia for
to $1 a ton, vs. $8 a ton for similar
grams at home.

A global greenhouse-gas bank, f
ioned after the NES approach, wil
discussed in Geneva. "The Adminis
tion supports the potential for this
of plan," Pomerance says. Still,
Clintonites haven't yet endorsed
idea, because they are reluctant to
U. S. companies off the hook quite
easily. So U. S. industry could still
up on the hot seat—though not nearl
soon as it had feared.

By Mary Beth Regan in Washin

NS

IE CASE FOR ɔT LETTING M ROT

ing old cons may make sense

wenty years ago, Quenton Brown stole $117 and a 15¢ cherry pie from a convenience store in Morgan La. The then-50-year-old drifter sentenced to 30 years in prison ut parole—a rather penalty for a man with of 51. But Brown d his time, 17 years of til he became the first of the Project for Old-soners, or POPS. At 67, ing from emphysema leeding ulcers, Brown e perfect candidate for onprofit POPS, which to help elderly nonvio-risoners gain freedom. ce Brown's release in POPS has aided 50 other geriatric es win parole and has set up pro- in five states, most recently Illi- n July. POPS has been an innovative for states to manage burgeoning populations with shrinking dol- Corrections costs are second only to care as the fastest-growing state t expenditure. Since 1986, the tab eeping criminals behind bars has led from $9.8 billion to $20.6 billion 2 (chart). Part of that increase is the high cost of caring for prison- ver the age of 55, whose annual p can run as high as $60,000—three that of younger prisoners who require as much medical attention.

URE. Money isn't the only reason have considered POPS. Long-stand- essure from the courts to decrease e populations and improve prison ions, such as health care and sani- , have also played a part. All but states have faced major litigation nging overcrowding in their pris- 'It's not a question of whether one will be released, but a ques- f who," says Jonathan R. Turley, ofessor at George Washington Uni- y's law school who founded POPS. why haven't more states embraced The answer: fear. Lawmakers are of appearing soft on crime and ath to risk releasing a prisoner who may go on to commit another offense. States that use POPS tread carefully. "We don't just rubber-stamp POPS' recommendations," says John Taylor, warden at the Staunton Correctional Center in Staunton, Va. "We do our own reviews."

Outward bound: Brown and POPS' Turley in 1989, before Brown's release

POPS tries to be discriminating: It represents only about 10% of the inmates it interviews. In addition to a minimum age requirement of 55, POPS only considers inmates who have served at least the average time for their offense and have completed tests that evaluate their likelihood to commit further crimes. Most corrections officials agree that older prisoners fare better on the tests. "They don't have the vim and vigor left to pillage the countryside," says John Wade of the Virginia Parole Board, noting that the bulk of crimes are committed by males between the ages of 15 and 24. One current POPS client awaiting parole is a 74-year-old double amputee who is half blind.

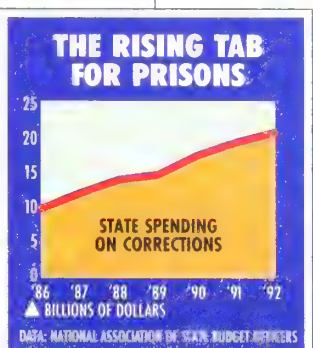
Before recommending parole, POPS representatives consult with victims to assess their views about an inmate's return to mainstream society. Prisoners who seemed like model POPS candidates have been turned down because of victims' objections. But if all goes well, POPS will help its clients obtain Social Security or find a job or will place them with family or friends. Quenton Brown, for example, has been working as a gardener in Tampa since his release. Turley, who runs POPS *pro bono* along with a handful of law students, says that as POPS gains momentum, he hopes to link up with corporations to find employment for some of these ex-convicts.

POPS will need all the help it can get. Prison populations are expected to balloon—especially in light of federal guidelines that keep criminals behind bars longer. Corrections experts predict that by 2000, the number of inmates over 55 could swell from less than 40,000 (about 3% of the total) to as many as 125,000. "The graying of America has also become the graying of America's prison population," says Paul Davis, chairman of the Maryland Parole Commission.

Corrections officials point out that some elderly inmates languish needlessly behind bars simply because they have no advocates and no place to go. "Why are we wasting scarce resources on a population that is not going to be causing problems and has a better chance of making it on the outside?" asks Ed Koren of the American Civil Liberties Union's National Prison Project.

A good question, and one that such states as Florida and California, which have the largest inmate populations, are asking as they consider launching their own POPS programs. But for such states, POPS will have to wait while they weigh the project's money-saving allure against the political ramifications of opening prison doors too quickly.

By Linda Himelstein in New York



PHOTOGRAPH BY BEVILY KNAPP; CHART BY ALBERTO MENA, BW

THAT'S STEAM—NOT SMOKE —ON WALL STREET

Ignore the gloomy pros and enjoy the hot summer rally

Stock market investors are sweating, and it's not just the weather. What's frightening them is that the Dow Jones industrial average is near its all-time high of 3568, the dividend yield on the Standard & Poor's 500-stock index has dropped to a dangerously low 2.8%, and some market gurus are comparing today's market to August, 1987, when stocks peaked and then began a tailspin that ended in the October crash.

Forget it. Relax and enjoy the summer rally. Sure, the stock market has some problems—especially the lackluster economic recovery—but the bull is not about to give way to the bear. The critical elements that helped push the market up more than 50% in less than three years are still at work. The combination of low interest rates, improved corporate earnings, and a torrent of cash from individual investors into mutual funds is a surefire recipe for higher stock prices.

ROLLING IN. In the first half of the year, investors plunked a huge $60 billion into equity funds, vs. $78 billion for all of 1992. And the pace is not letting up. Fund sales usually slacken in the summer months, but July sales should weigh in at about $8.2 billion, according to Robert Adler of AMG Data Services. That's an increase of 25% over July, 1992.

That money will keep rolling in as long as interest rates stay down—and they probably will. Despite rumblings about tighter money from the Federal Reserve and fears of higher food prices induced by the farm belt floods, inflation is a paper tiger. Wage gains are almost nonexistent, unemployment is sky high, and oil prices are tanking.

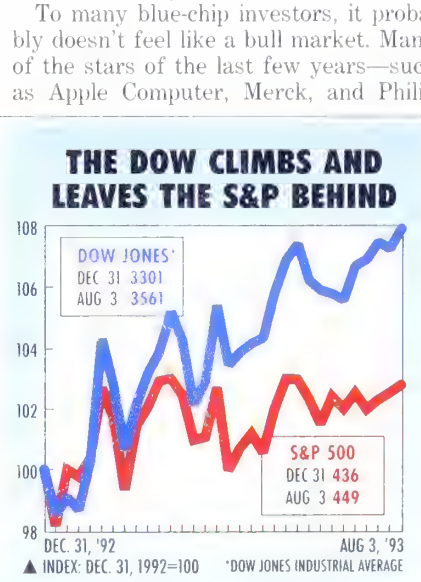
Still, the Wall Street wags are downbeat. In the latest poll of 130 newsletters by *Investors Intelligence*, only 38.9% were bullish, while 37.3% were bearish for the long term and 23.8% expected a short-term correction. But don't be cowed by the pros. That so few are bullish at a market high bodes well for stocks, says pollster Michael L. Burke. At the peak in 1987, he notes, 60% were bullish and only 20% bearish.

To many blue-chip investors, it probably doesn't feel like a bull market. Many of the stars of the last few years—such as Apple Computer, Merck, and Philip Morris—are getting mauled. And though the Dow has gained nearly 8% far this year, the broader S&P 500 in is up only 3% (chart). "Equity invest are getting sticker shock, and it's m ing them unhappy," says John W. I len, who heads equity research at M sachusetts Financial Services, wh runs $32 billion in mutual funds. "I this is the '90s. The kind of returns y saw in the '80s are gone."

The divergence between the 30 D stocks and the 500 S&P stocks a gnaws at some pros, since the broa S&P is a far better measure of the equ market. "The S&P 500 has basically g nowhere since February," says David Shulman, investment strategist at S mon Brothers Inc., who expects a m ket sell-off this quarter. "The Do sending the wrong signals."

PROFIT PRESSURE. But the two inde have parted company before without sastrous results. Midway in 1992, Dow was outpacing the S&P, but the t finished the year with near-identical sults. That could happen again this ye

THE DOW CLIMBS AND LEAVES THE S&P BEHIND



▲ INDEX: DEC. 31, 1992=100 *DOW JONES INDUSTRIAL AVERAGE

DATA BRIDGE INFORMATION SYSTEMS INC

gh it would probably take a huge from the large-capitalization con- er growth stocks that dominate the 500 and have been under profit pres- from price-conscious consumers.

it even if the S&P doesn't close the it's not fatal for stocks. The Dow's igth is coming, in part, from cycli- or economically sensitive, stocks as AlliedSignal, Caterpillar, Gener- Motors, and United Technologies. e cyclical stocks have more influence he Dow than on the S&P, all the gence is telling investors is that the omy is looking up.

fact, the long-term bullish case for ts rests largely on an improving omy and better profits, since ana- believe interest rates have driven market about as high as they can. ar, second-quarter operating profits companies in the S&P 500 are up %. That's about 2.5 percentage s better than expected, says Ben s of Zacks Investment Research, because of it, analysts are ratchet- up forecasts for coming quarters.

"The worst of the economic news is behind us," declares Byron R. Wien, U. S. investment strategist for Morgan Stanley & Co., who expects economic growth in the second half to accelerate to 3% from the first half's anemic 1%. That will help the profit picture.

PROFIT PROSPECTS. "The recovery in earnings, while not spectacular, will still be in the 11%-to-15% range," says Timothy G. Connors, who manages $600 million for CoreStates Investment Advisers. Based on the past 12 months' earnings, the price-to-earnings ratio of the S&P is an uncomfortably high 23. Looking forward, says Connors, it's a far more moderate 16. "The long-term average is only 14, and that incorporates a lot of periods when interest rates and inflation were a lot higher than they are now."

Improving profits make many stocks—especially the beaten-up technology issues—look cheap. Melissa R. Brown, director of quantitative analysis at Prudential Securities Inc., says Advanced Micro Devices, Compaq Computer, Exar, Hewlett-Packard, and Raytheon sell at less than 13 times the earnings projected for the next 12 months.

The profit prospects may even get a further lift from the currency turmoil in Europe, which paves the way for interest rates to come down and give a boost to the recession-racked continental economies. That could mean better earnings for the companies in the S&P 500, which get about 40% of their earnings from overseas, even though a stronger dollar might cut into some of those profits. "We're advising people to buy U. S. companies that can do well abroad," says William E. Dodge, investment strategist at Dean Witter Reynolds Inc. Those companies include General Electric, Fluor, Foster Wheeler, and Ingersoll-Rand.

Dodge, who has been bullish, thinks the market could deliver another 6%-to-7% in total return by yearend. And the evidence suggests he may right. The only ones who will be sweating will be the gurus who have been telling their customers to get out of stocks.

By Jeffrey M. Laderman in New York

NGS & LOANS

HE MUD N A FANCY LAW FIRM

l, Weiss could pay a bundle to settle S&L scandal charges

axpayers have borne the brunt of the pain and suffering of the sav- ings and loan fiasco. But over the few years, regulators have been ag- sively pursuing professionals, in- ng lawyers, accountants, and direc- And officers, for their work on lf of failing thrifts. Now, BUSINESS K has learned that Paul, Weiss, Rif- Wharton & Garrison, blue-chip, New York- d law firm, is close to ing charges by feder- nking regulators that sisted David L. Paul, embattled ex-chairman CenTrust Savings , in his alleged loot- of the thrift.

ithout admitting liabil- Paul, Weiss is expect- pay between $40 mil- and $45 million to e allegations by the olution Trust Corp. Office of Thrift Su- ision, according to ces familiar with the ement talks. The firm been clashing for months with the government over the firm's role in the demise of CenTrust, once the largest S&L in the Southeast. Its collapse has cost taxpayers more than $1.7 billion, making CenTrust the fourth-most-costly thrift to go under. Paul, Weiss was the primary counsel for CenTrust from 1983, when David Paul gained control of the thrift, until 1990, when the government took it over. For his part, Paul is facing a 100-count indictment for fraud and misappropriation of funds. The ex-developer, who has vociferously maintained his innocence, declined to comment. His trial is scheduled for Sept. 20.

If a deal is reached, Paul, Weiss would join the ranks of other powerhouse firms, such as Kaye, Scholer, Fierman, Hays & Handler, that have paid a penalty for their S&L work (table). Since 1989, the RTC alone has collected or will collect close to $500 million from professionals. Of that, almost $200 million comes from accountants, with about $150 million from lawyers. And there's more litigation to come. The Federal Deposit Insurance Corp. and the RTC combined have 500 suits pending against professionals.

Many lawyers and other professionals criticize the government's campaign against them. "I think it's pretty obvious that the FDIC and RTC are only looking for money. So they sue directors, law firms, and accounting firms as an extension of that," charges Rosemary Stewart, a partner at Jones, Day, Reavis & Pogue, who once worked at the OTS. Jones, Day, without admitting liability, in April settled an RTC action for $51 million related to the firm's representation of Charles Keating's now-infamous Lincoln Savings & Loan Assn.

But regulators have

HOW THE PAUL, WEISS DEAL STACKS UP

Paul, Weiss, Rifkind, Wharton & Garrison could join a long list of blue-chip accounting and law firms who paid dearly for their role in the S&L crisis. Here are some of the biggest settlements:

ARTHUR ANDERSEN In July, 1993, the accounting firm agreed to pay $79 million to settle charges that its audits of five thrifts, including Lincoln Savings & Loan, were negligent.

KAYE, SCHOLER, FIERMAN, HAYS & HANDLER In March, 1992, the New York law firm settled charges that it helped Charles Keating mislead regulators about troubles at Lincoln Savings and Loan for $41 million.

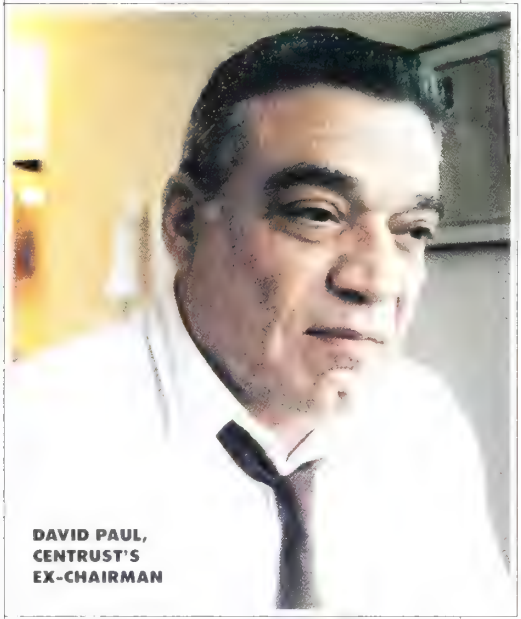
ERNST & YOUNG In November, 1992, the big accounting firm agreed to pay $400 million to settle federal banking charges that it helped mislead regulators about the financial health of several thrifts.

JONES, DAY, REAVIS & POGUE In April, 1993, the Cleveland law firm paid $51 million to settle government charges that it aided Keating's looting of Lincoln.

DATA BUSINESS WEEK

maintained that professionals knew or should have known that many of the financial activities of the S&Ls were unsafe and unsound. "They started representing management's interests at the expense of the institution," claims Michael Manning, a private lawyer who works for the RTC on professional-liability matters. "And that's why they find themselves on the wrong end of these lawsuits."

LUMINARIES. For Paul, Weiss, ending up on the wrong end is particularly noteworthy, given the firm's sterling reputation and impressive array of Wall Street clients, such as Time Warner Inc. The firm boasts such luminaries as Arthur L. Liman, Michael R. Milken's lawyer and former counsel to the Senate committee that investigated the Iran-*contra* scandal, and Theodore C. Sorensen, a former White House adviser to John F. Kennedy. The principal lawyer handling CenTrust's account was Peter R. Haje, who left Paul Weiss in 1990 to become general counsel of Time Warner. Haje did not return calls seeking comment.



DAVID PAUL, CENTRUST'S EX-CHAIRMAN

The settlement talks between the RTC and Paul, Weiss have been aimed at heading off costly litigation and public embarrassment. Since there have been no public charges filed yet, neither the RTC nor OTS would comment for this story. Phone calls to several Paul, Weiss partners were not returned, and the firm's counsel in the matter, New York-based Sullivan & Cromwell, could not be reached for comment.

Sources familiar with the charges advanced by the government against Paul, Weiss say the firm's liability stems from its intricate involvement in some of David Paul's allegedly shaky investments and financial dealings. The feds claim that the firm, in advising CenTrust, both on the legality of those transactions and on their compliance with state and federal regulations, breached its fiduciary duty to protect CenTrust's depositors.

Many of the transactions concerned CenTrust's $1.3 billion investment portfolio of junk bonds, much of it purchased from now-defunct Drexel Burnham Lambert Inc. Losses on CenTrust's junk-bond portfolio cost the thrift as much as $250 million, according to a $274 million RTC suit against Paul and other CenTrust directors. The suit alleges that the thrift's junk holdings were excessive and unacceptably risky and violated CenTrust's own internal investment policies.

PENSION FUNDS. Some of the government's evidence of Paul, Weiss's alleged complicity consists of letters written to state regulators by the firm. "Every letter we ever received was drafted by" Paul, Weiss, recalls one regulator. Adds Barry D. Hunter, a Miami lawyer who represented 2,000 CenTrust pensioners in a now-settled action against David Paul and the law firm, "It is fairly clear to me that everything that was done, was done with the input and knowledge of Paul, Weiss."

Hunter's case alleged that David Paul and CenTrust's board used employee pension funds to make risky investments in junk bonds and the company's own volatile stock. That, Hunter contended, violated federal pension regulations that prohibit thrifts from using these funds to make large investments in unsafe and unsound securities. Because Paul, Weiss served as a principal outside counsel to CenTrust, the pensioners charged that the firm "knew or should have known" that the investments were illegal. Hunter's case was settled in late 1991 for $1.7 million.

Paul, Weiss did not admit any liability in this lawsuit, nor is it expected to do so in the anticipated settlement with the government. But the impact on the firm from its connections to one of the most notorious players in the $500 billion thrift debacle is likely to persist for a long time.

By Linda Himelstein in New York, with Gail DeGeorge in Miami

"EVERY LETTER WE EVER RECEIVED WAS DRAFTED BY PAUL, WEISS," RECALLS ONE BANK REGULATOR

MUNICIPAL BONDS

MUNIS GET TOUGHER WITH THEMSELVES

Will new self-policing curb abuse

The municipal-bond market has lo played by its own set of rules. U like corporations, city and st governments don't have to publish reg lar reports on their fiscal health, setti the stage for unpleasant surprises investors. And Wall Street's campai contributions to the local politicians w allocate bond-underwriting busine raise questions about whether taxpaye always get the best deal.

Now, the $1.2 trillion muni market trying to improve its image. Amid gro ing congressional criticism and a feder probe of the market, the Municipal Se rities Rulemaking Board on Aug. 4 p posed new rules aimed at curbin abuses. One rule would require deale to tell prospective muni-bond buye which issues provide ongoing financ data—something that might pressu others to do so. The other would b Wall Street firms and their employe from making campaign contributions e pressly to win underwriting contract Those who get contracts would have disclose relevant contributions. T MSRB "should ensure that such contrib tions do not play a role in the awardin of business," says Christopher A. Ta lor, the MSRB's executive director.

BACK-SCRATCHING. Experts note t MSRB, a self-regulatory association bond dealers, has no authority over bo issuers and lacks the power to chang much. The proposals "don't go fa enough," says Securities & Exchang Commissioner Richard Y. Roberts. "Bu given their jurisdictional restrictions, I not sure what else they could do."

Critics fear that the MSRB proposa would only prompt dealers to make ot er back-scratching arrangements. Bu further reform probably isn't in t cards: A 1975 law limits the federal go ernment's ability to police muni-bond i suers, as well as their accountants, a torneys, and trustees. And despite th interest of key lawmakers such a House Energy & Commerce Committe Chairman John D. Dingell (D-Mich Congress is unlikely to wade into thorny states' rights issue. For buyer of municipal securities, the operativ motto remains *caveat emptor.*

By Dean Foust in Washingto

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BY GENE G. MARCIAL

HOOKED ON THE WIRELESS CONNECTION

Wireless is the new buzzword on the Street, and some smart investors have been quick to tune in to the idea, snapping up shares in companies involved in wireless communications technology. This technology uses radio-based systems in transmitting telephone and data signals without the aid of metal wire or fiber-optic cable.

"Digital wireless technologies will generate multibillion-dollar investment opportunities," says analyst Eric Zimits of Volpe Welty, a San Francisco investment firm. Here are Zimits' top three stock picks:

First on his list is Mobile Telecommunication Technologies, a leader in wireless messaging whose SkyTel unit pioneered the nationwide beeper-paging system. Mobile, which has integrated paging with portable computing technology, is developing a two-way beeper messaging network, which, Zimits argues, could become one of the hottest markets in communications. He sees earnings jumping from 25¢ this year to 60¢ a share next year and $1 in 1995. Mobile's stock has raced to 24 a share from 15 in February.

Zimits is also high on Paging Network, the nation's largest and fastest-growing provider of paging services, with 2.5 million beepers in 25 states. The company is a low-cost provider and price leader. By 1995, Zimits sees Paging Network covering all the states, and he thinks the stock has yet to reflect the company's "tremendous earnings growth potential," although the company may still be in the red this year and next. Paging's rapid geographic expansion has put pressure on cash flow. But Zimits expects it to be in the black by 1995. In 1996, he sees earnings of $16 million, or 47¢ a share.

Qualcomm is another of Zimits' "must-buy" stocks. Its CDMA (for control division multiple access) technology—allowing a large number of users to simultaneously get access to a single radio frequency channel—will be used by Bell Atlantic, Pacific Telephone, and U. S. West as the cornerstone of their digital wireless systems. Zimits sees Qualcomm earning 40¢ a share next year vs. an estimated 12¢ this year and a 21¢ loss in 1992.

ZIMITS' WIRELESS PICKS

Stock	1993 High	Price Aug. 4	1993 earnings cents per share*
MOBILE TELECOM. Two-way messaging network	26	24	25¢
PAGING NETWORK Fastest growing paging company	36	34	–45
QUALCOMM Digital wireless products maker	70	67	12

Estimated DATA BRIDGE INFORMATION SYSTEMS INC

Furthermore, digital wireless networks are better suited to integrate voice, data, and video traffic, explains Zimits. So he expects cable-television providers, such as Time Warner, to look hard at converting to wireless. David Bednarsh, chairman and CEO of Cellular Group, a Sarasota (Fla.) consulting and management firm, agrees. He says wireless promises to be an alternative provider of more diverse TV and video programming at lower rates.

QUIDEL'S CRUCIAL TEST

Unlike most CEOs, Scott Glenn isn't gun-shy about forecasting his company's earnings. The chairman and chief executive of Quidel insists that he doesn't just plan on meeting analysts' earnings expectations of $1.4 million, or 10¢ a share, next year. He expects to beat them by a wide margin.

A maker of simple and fast-acting diagnostic tests for pregnancy, infectious diseases, and auto-immune disorders, Quidel earned 3¢ a share in 1992 after losing 47¢ in 1991. And 1992 sales of $27 million just matched 1991's.

So what's behind Glenn's rosy outlook? For one thing, he expects Quidel's Safeplan test to be a big hit next year. Safeplan determines the maximum number of infertile days in a woman's menstrual cycle. Glenn thinks European chemical and pharmaceutical giant AKZO, which has the licensing rights to market Safeplan in Europe, will start selling the product early next year.

Glenn sees European sales hitting $30 million next year, adding about 30¢ a share to the bottom line. In the first quarter alone, he expects Saf sales to reach $5 million and net share. In the U. S., Scott expects t an application with the Food & Administration to market Safepla

"Test results in the U. S. and Eu were fine," notes John Girton, an lyst at Van Kasper, a San Fran investment firm. Investors, he have been underestimating the w of Quidel's many test kits, inclu Conceive, a one-step, one-minute that allows women to detect a preg cy as early as the first day of a mi menstrual cycle. Girton thinks Q shares, currently trading at 4⅝, double over the next 12 months.

KNOCKOUT KNOCKOFF SCENTS

Jean Philippe Fragrances has well, smelling sweetly to inve since April, 1991—when its st trading at 4, was favorably discu in this column. On Aug. 4, it close nearly 17 and has been attracting shorts, who can't believe that Phili a maker of alternative designer grances—known less euphemisti as knockoff perfumes—can sus such rapid earnings.

So are the bulls now running sca After all, revenues started out at million in 1989 and climbed to $ million last year as earnings vau from 10¢ a share to 50¢. How m more growth can Philippe muster?

Quite a lot more, say some big in tors who have recently bought in. I can Soukup, an analyst at B Stearns, agrees. For 1993, he earnings of 66¢ and 85¢ next year sales of $62 million and $78 mill respectively.

Despite the economic malaise in rope, Philippe's French unit, Inter F fums, is about 20% ahead of 199 sales. Soukup believes growth will enhanced in Europe by a licensing with Burberry's of Britain for nonknockoff production and worldw marketing of Burberry's line of grances for men and women. In a tion to that nonknockoff product, lippe also acquired the license for popular Ombre Rose perfume from fin last month.

And a new boost to the stock may around the bend: In September, lippe will launch an infomercial gram on Hispanic cable-TV netwo Univision and Telemundo. Direct sponse TV commercials have been a hit for many products, notes Souku

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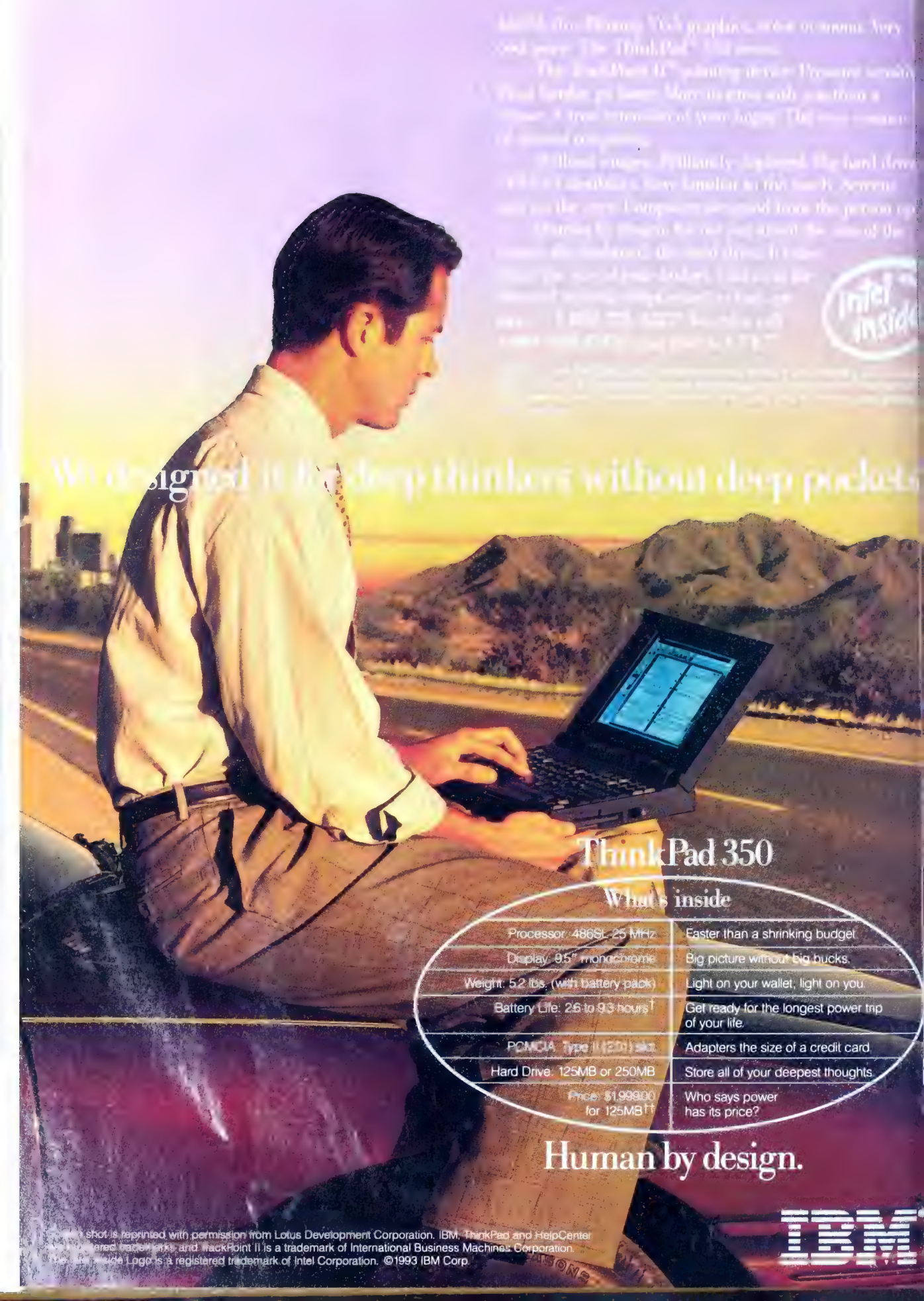

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evelopments to Watch

ED BY PETER COY

YEAST PROTEIN MAY FIGURE THE ALZHEIMER'S FIGHT

The discovery of a substance that zips itself together from simple protein building blocks may help scientists unravel the mystery of Alzheimer's disease. Biologist Shuguang Zhang at Massachusetts Institute of Technology was studying EAK16—a yeast protein constituent made of 16 amino acids—because pairs of the protein strings have the un-al habit of binding like the halves of a zipper. When Zhang osed these zippers to a salt solution, they turned into a ı membrane resembling the brain-clogging plaque of heimer's. Understanding why, says Zhang, may lead to ɣs to disrupt the formation of the plaque.

Vhat's more, the membrane may have valuable proper-. It starts out as a biopolymer that resists most chemical vity, but then gradually reverts back to its amino-acid lding blocks. That leads Zhang to predict that it could t drugs to protect them from stomach enzymes while allow-the medication to be absorbed by the intestines.

YBEANS THAT FLOODS N'T DROWN

s too late to save soybeans drowned in the great Midwest-rn flood of 1993, but farmers may do better in future ıds with crossbreeds of a bean from southern China. Near-ıll soybeans planted in the U. S. are descended from beans n dry Manchuria. In July, 1990, Tara Tran VanToai, a nt physiologist with the U. S. Agriculture Dept. and Ohio te University, traveled to the wetter Shanghai region in rch of a bean that would better withstand immersion. The ıgtze River had just flooded, and the soybean plants at re-rch institutes in the river basin were destroyed. But Van-ıi found vibrantly healthy plants in Chinese villagers' back-d gardens that also had been flooded. The seeds had been sed down through generations of families.

Back in the U. S., VanToai and colleagues are trying to lo-e the genes responsible for flood tolerance and crossbreed Chinese varieties with American ones. She says farmers y be able to plant the new strains in five to eight years. ods are less of a problem than droughts for U. S. bean mers. Still, VanToai says the discovery of a useful trait in kyard gardens illustrates the importance of biodiversity.

IIS ENZYME MAY AKE OIL BURN CLEANER

ending Clean Air Act amendments are pushing oil compa-nies to reduce sulfur in refined petroleum products, the ain behind acid rain and smog. Conventional methods using rganic catalysts are costly because they require high tem-ature and pressure. So Texaco Inc. is working with four-ır-old, Houston-based Energy BioSystems Corp. on a way to sweeten—or desulfurize—oil before it reaches refineries. The sweetener is an enzyme that the bacterium *Rhodococcus rhodochrous* evolved to survive in the soil around coal deposits.

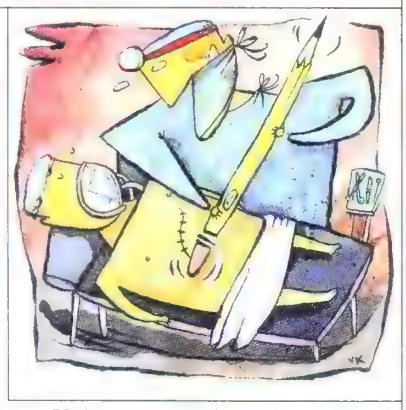
The Institute of Gas Technology isolated the family of bacteria in 1988 and licensed the technology to Energy BioSystems in 1991. Energy BioSystems has since sequenced the key genes. The bacteria-produced enzyme works at room temperature to break the bonds between carbon and sulfur atoms. Past attempts to use desulfurizing bacteria failed because they ate too much oil. These bacteria don't consume oil—they just produce enzymes. St. Louis-based Petrolite Corp. and Energy BioSystems plan to desulfurize 10 to 100 barrels of oil a day at a pilot plant by mid-1994 and hope to build a commercial plant by 1996. Meanwhile, Energy BioSystems and the Institute of Gas Technology are speeding up evolution by rearranging the bacteria's genes to turn up enzyme production.

CLEARER SIGNPOSTS ON THE ROAD TO A PATENT

Under President Clinton's nominee for patent commissioner, Bruce A. Lehman, the stodgy U. S. Patent & Trademark Office is about to become more inventive. In the past, patent examiners have had to give thumbs up or down on applications in new fields, such as software or genetic engineering, without clear guidelines on what's patentable. Often, their early decisions have been second-guessed by the courts.

So Lehman plans to develop a mechanism for figuring out the appropriate sort of intellectual-property protection for new technologies. He plans to hold hearings and establish policies before unprepared examiners are inundated with applications. "That way," says a senior patent official, "we can be ahead of the curve, rather than having a policy thrust upon us." Lehman plans to hold early hearings on one of today's most controversial issues—how much researchers have to discover about the DNA sequences and functions of individual genes before they can win patent protection for them.

KEEPING THE BODY'S REPAIRMAN FROM GOING TOO FAR



After an injury, the body repairs itself by knitting collagen strands into scar tissue. But sometimes it gets overzealous and makes too much. That can cause pain and disfigurement, immobilize joints, and damage internal organs, including the heart and lungs.

Boston-based Fibromed Inc. recently received an exclusive license from Thomas Jefferson University, a Philadelphia medical school, to make a gene-spliced compound for halting scarring. It blocks synthesis of collagen by binding to receptors on the surface of collagen-producing cells. Fibromed hopes to begin animal trials by the end of the year and start human trials in 18 months if it can get Food & Drug Administration approval. The compound might be used after surgery to limit scarring. Fibromed is also working on drugs that stop scarring by inhibiting an enzyme that restructures collagen molecules so that they can form dense layers of scar tissue.

GENE HUNTERS GO FOR THE BIG SCORE

A host of startups say a new approach could reshape medicine

In a gleaming Gaithersburg (Md.) laboratory, scientists, robots, and 30 machines called automated sequencers work around the clock to read the biological book of life. Starting with a soup of human DNA, they lift out sections of individual genes and partly identify 600 genes a day. This process, called gene sequencing, is making big strides toward the goal of identifying each of the estimated 100,000 human genes. That will help researchers unlock the deepest mysteries of biology—from the delicate dance of an embryo's development to the marvel of memory.

The scientists at the nonprofit Institute for Genomic Research (TIGR) and Human Genome Sciences Inc., which funds TIGR's work, have in mind something far more practical and lucrative, however. They believe their prowess at finding genes will revolutionize medicine and drug development—perhaps even replace the discovery strategies of today's biotech industry. Declares TIGR Director J. Craig Venter: "We are moving from the era of biotech into the genome era," where the search for new drugs starts differently. Conventional biotech companies tend to study a disease first, then engineer DNA to produce drugs or find ways to short-circuit the malady. The new gene sleuths first identify genes, then figure out what they do in hopes that this knowledge will lead to better ways to treat disease.

GOLD RUSH. The approach is years from producing a marketable product, but it is fast winning advocates. The search for genes has become "a gold rush," says John T.W. Hawkins, managing director of Russell Reynolds Associates Inc., a Washington-based biotech personnel recruiter. More than a half dozen startups have recently sprung up to join a handful of others in mining human genes (chart). "All the top-level scientists have probably been locked up [by companies]," says Stanford University Nobel Laureate biochemist Paul Berg.

Biotech powerhouses Genentech Inc. and Amgen Inc. have also leaped into the fray. "Sequencing will help us find more products—and find them more quickly," explains Amgen CEO Gordon M. Binder. And even the mammoth drugmakers are bitten with the gene-prospecting bug. Glaxo Holdings PLC is advertising in scientific journals for researchers with "a burning desire to go gene hunting." Rhône-Poulenc Rorer executives say they're scouting for a gene-sleuthing partner. On May 20, SmithKline Beecham PLC helped put a value on such a company: Sources say the drugmaker inked a deal worth up to $120 million with Human Genome Sciences for exclusive rights to TIGR's growing trove of gene discoveries.

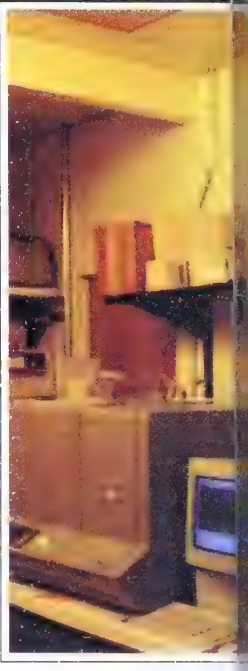
This heavyweight interest comes despite enormous risks. "The notion that gene discovery can drive the biotech enterprise is gaining acceptance but has yet to be proven," cautions Baylor University molecular geneticist Richard A. Gibbs. Decades after figuring out the genetic defect in sickle cell anemia, critics point out, no drugs that directly correct the flaws are on the market. Legal uncertainty also shadows the endeavor. Companies are racing to sequence genes so they can stake out claims to any chunk of DNA that offers even a remote chance of patentability—reasoning that if they own the rights, they will profit if their discoveries are used. But the Patent Office and the courts have yet to decide which discoveries are patentable.

In the long run, though, experts believe that reading the genetic code will transform medicine if only because DNA is biological destiny. Each person's genetic code, written with 3 billion molecular "letters," governs everything from eye color to some risk of heart dise
What's more, genetic mutations that
cur in life can lead to scourges such
cancer and diseases related to ag
Finding the responsible bits of DNA,
uring out what they do, then devisin
way to correct the flaw would see
surefire way to beat disease. It i
that simple, of course. The search
the gene that causes cystic fibrosis,
example, cost $150 million and t
three years.

Since that 1989 discovery, howe
"a lot of things have come togeth
says venture capitalist Mark Levin
the Mayfield Fund, founder of Mille
um Inc., an $8.45 million ge
sleuthing venture in Cambrid
Mass. Initially, many thought
government-funded Human
nome Project, a 15-year effort
produce "maps" and sequence
human and animal DNA, wo
take decades to pay off.
more. "We have all been flabl
gasted at how much fas
everything is going than we thoug
says Dennis T. Drayna, a founder
gene prospector Mercator Genetics I
More than just mapping genes, sci
tists have begun to uncover those lin
to such killers as atherosclerosis, c
cer, and Alzheimer's disease—genes w
the potential to create blockbus
drugs.

FIXIT GENE. That has lured big drugm
ers and venture capitalists. It also
created a "paradigm earthquake"
drug development, says Kevin L. Kins
la, founder of La Jolla (Calif.)-based
alon Ventures and CEO of Sequana Th
apeutics, a $10 million startup t
opened its doors on Aug. 1. With
day's techniques, researchers probe
body's metabolic pathways—complex

RESEARCHERS IDENTIFY GENES AND FIND OUT WHAT THEY DO IN HOPES OF FINDING CURES FOR DISEASE



TIGR'S VENTER: "WE ARE MOVING FROM THE ERA OF BIOTECH INTO THE GENOME ERA"

es of biochemical reactions—search-
or ways to intervene in disease.
biotech drugs come from turning
ody's own proteins into treatments,
the case of Amgen's Epogen, which
ilates the production of blood cells.
approaches entail finding chemi-
hat somehow change a metabolic
way—by blocking an enzyme or
ng off a gene, for instance.
e results often fall short of expecta-
, says Kinsella, because "these
bolic pathways are far more com-
than anyone thought." There may
ozens of proteins involved in a dis-
-and a drug that mimics or targets
one is unlikely to work precisely,
ut side effects. "If you don't under-
the pathway, you may target the
g part of it," says David J. Galas,
is leaving the government genome
to become vice-president for re-
h and development at Darwin Molecular Technologies. The way to improve the odds, says Kinsella, "is to go back to the underlying genes."

Consider cancer. Scientists have already found several types of genes that contribute to malignancies. Some, called tumor suppressors, work like brakes, checking cell growth. If a tumor-suppressor gene is damaged, the brake pedal is released, allowing cells to grow and divide into deadly tumors. Another newly discovered gene, one of several in a chain that leads to colon cancer, is more like Mr. Fixit. When the gene is flawed, cells become less capable of repairing damage to other sections of DNA.

These findings have stimulated "great hope and excitement," says geneticist Raymond L. White of the Howard Hughes Medical Institute at the University of Utah. BUSINESS WEEK has learned that in new, unpublished experiments at one major university, scientists stopped a tumor in a test tube by adding a correct copy of a tumor-suppressor gene into the cells—in essence, putting the brakes back on. Once researchers figure out how the Mr. Fixit gene works, there's the seductive prospect of a drug capable of preventing cancer and other diseases caused by DNA damage. More likely, though, the new genetic knowledge will lead to a variety of drugs or therapies that are aimed at correcting a flaw caused by one of the many genes involved in cancer.

In the race to mine these genetic nuggets, companies bet on two competing approaches. TIGR's strategy is brute-force sequencing—reading part of the codes of thousands of genes a week. That fragment is enough to tell Venter and his team if the gene is new or potentially interesting. If it's both, they decode the entire gene and try to figure out what it does, a prerequisite to determining its therapeutic potential. Venter has filed patent applications on just the original gene fragments, but legal experts say that the full gene's structure and function will be needed to get a patent.

ZEROING IN. Other companies, including startups such as Sequana, Millennium, and Darwin Molecular Technologies in Kirkland, Wash., begin with particular diseases in mind. Sequana, for example, is targeting hypertension, diabetes, and obesity. Since some percentage of the people with these diseases inherit them, companies such as Mercator Genetics find families who are unusually susceptible or resistant. Then, using the "maps" created by the Human Genome Project, they zero in on the responsible genes—a strategy known as "positional cloning."

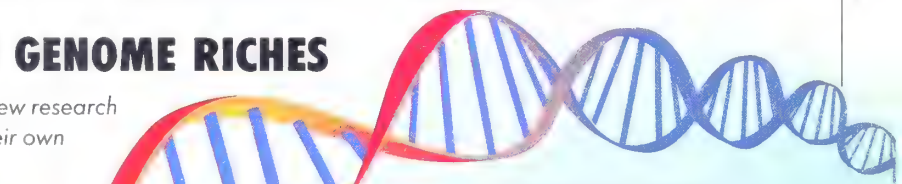
It's too early to tell whether one approach will prove superior. The genome business "is where the original biotech industry was 15 years ago," says venture capitalist Robert Johnston. Nor is it clear how fast the companies can transform their genetic knowledge into new drugs. Some biotech executives remain skeptical. "We have a refrigerator full of sequences, but we don't know what they do," says Kathleen Mullinix, CEO of Synaptic Pharmaceutical Corp. Still, the startups are betting that tales told by twisting strands of DNA will form a new chapter in medicine and drug development. Says biochemist Radomir Crkvenjakov of Argonne National Laboratory: "This is the future of biotechnology."

By John Carey in Washington, with Joan O'C. Hamilton in San Francisco

PHOTOGRAPH BY BRETON ... ILLUSTRATION BY RAY VELA BW

AKING OUT THE HUMAN GENOME RICHES

companies are setting out to mine for gold in new research
NA, while some drugmakers are setting up their own
search operations
ping into
ps.



- **THE INSTITUTE FOR GENOMIC RESEARCH (TIGR)** Reads the DNA code of thousands of genes a week to find those involved in disease.
- **HUMAN GENOME SCIENCES** Sells genetic knowledge produced by TIGR to pharmaceutical companies.
- **INCYTE PHARMACEUTICALS** Reads the DNA code of genes from cells. Figures out what they do and why they turn on.
- **SEQUANA THERAPEUTICS** Searches for genes underlying obesity, hypertension, diabetes, asthma.
- **DARWIN MOLECULAR TECHNOLOGIES** Finds genes involved in cancer, autoimmune diseases, AIDS and designs drugs from them.
- **MILLENNIUM** Finds genes for kidney disease, immune disorders, obesity and develops drugs from them.

DATA BUSINESS WEEK

MATERIALS

COMMERCIAL PROPOSITION? SPURNING PATENTS, WARD INSISTS ON 51% OF ANY DEAL

PLASTIC THAT CAN WITHSTAND A NUCLEAR BLAST?

Starlite dazzles scientists, but its inventor won't divulge the recipe

Maurice Ward pulls aside a red suspender and reaches into his shirt pocket. Out comes a thin, cream-colored rectangle about the size of a bathroom tile. Before handing it to a visitor, he hesitates, aware that this nondescript plastic may represent a breakthrough in materials science that rivals John Wesley Hyatt's invention of plastic in 1869. "This is only to look at," he cautions, "not to walk away with."

Ward's brainchild, which he calls Starlite, is waxy to the touch and as stiff as rubber sheeting. This piece is covered with marks, and Ward points to a faint discoloration at the center. "That one's from Foulness," he says, referring to 1990 tests at Britain's answer to Los Alamos National Laboratory. Scientists at the Atomic Weapons Establishment in Foulness, 50 miles east of London, bombarded the tile with lasers that simulate the heat of a nuclear explosion.

TOUGH AS STEEL. In the most severe test, the plastic was zapped for two minutes—plus by laser beams packing sufficient energy to produce spot temperatures of 10,000C. Yet Starlite emerged essentially unscathed. A Foulness scientist says he is stumped for why, despite photos showing that a thin layer of ionized gas formed on the surface and seemed to insulate the plastic. Nothing should slough off that much energy, adds Rustum Roy, a professor of materials science at Pennsylvania State University. The sturdiest metals vaporize above 2,000C, and pure carbon goes poof at 3,500C. "This stuff sounds like it's breaking the laws of physics," Roy said when told of Starlite by BUSINESS WEEK.

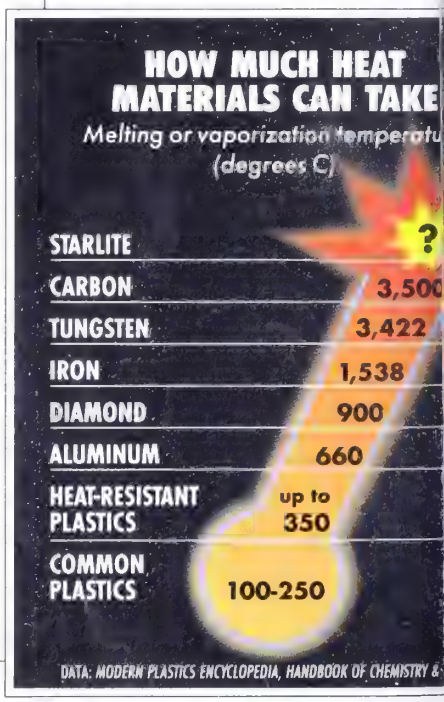
That was the universal reaction when Ward, a hairdresser turned recycler of plastics, claimed in 1989 that he had concocted a plastic that was barely singed by the 2,700C flame of a welder's acetylene torch. Snickers turned to amazement when a major British industrial lab couldn't touch Starlite even with a plasma torch, which is hotter and easily cuts through 18 inches of steel. One researcher, who asks not to be named, laid a ⅛-inch-thick sample of Starlite on a 1-inch-thick slab of aluminum. The plasma torch sliced the aluminum "like a hot knife through butter," he recalls—but it stopped when it hit the plastic.

Then, there was the scientist at Imperial Chemical Industries PLC who placed some Starlite in a small laboratory furnace designed to measure precisely how much smoke and energy a material releases during combustion. But this plastic wouldn't burn. Penn State's Roy, after checking with his research contacts in Britain's defense community, is impressed, too. "It's not hokum," he says. "Ward has found somet

Exactly what is a secret known to Ward and a few family members Vladimir Hlavacek, professor of che engineering at the State Universi New York at Buffalo, speculates Starlite contains "a lot of silicon bide," which is an excellent heat ductor. It's conceivable, he adds, t backyard experimenter could, th trial and error, hit upon an impo discovery by combining various nonpolymeric materials with exi plastics and flame-retarding chemi

LIFESAVER? Needless to say, defens cials are intrigued. Starlite seen promise coatings that could protec satellites from laser weapons—or sl on tanks that could fend off heat fr nuclear blast. Britain's Defense M try is now running tests at Camb University and the Royal Signals & dar Establishment in Malvern to g Starlite's suitability as a coating fo listic missiles to prevent overhea during reentry into the atmospher one July test, it took just nine sec to heat a warhead to 900C. But a p thin skin of Starlite halted the tem ture rise at 40C.

In addition to being virtually proof, then, Starlite may be a su thermal insulator. James P. Smigie, keting manager for high-perform polymers at Mitsui Toatsu Chem Inc. in New York, recalls a demon tion three years ago in which a lite tile was blasted with a blowt for five minutes—while the other stayed cool enough to touch. Even u fire by the high-power lasers at ness, the temperature of the back of the tile rose by less than 25C.



f these properties can be translated commercial products, Starlite's pay- could be huge. It could become rev- ionary garb for firefighters. And rlite upholstery and wall coverings ıld reduce the hazards of fire in ıes, offices, and planes. "It's extraor- ıry stuff," says James A. Stempson, sident of TransTechnology Electronics , a Peoria manufacturer of electri- cables and connectors that hopes to ıufacture Starlite.

ER SECRECY. So far, though, nobody Ward has produced the material—be- se Ward drives an outlandish bar- ı. Not content with the usual inven- s royalty of a small percentage of s, he insists that any company want- to capitalize on his baby create a t venture and cede a 51% ownership se to him. But since he spurns re- sts for samples—to prevent his reci- rom being divined by chemical anal- —it isn't known whether Starlite can nade commercially. Ward won't even for a patent because that would re- e divulging the ingredients.

Researchers at several U. S. plastics pliers are keeping a watchful eye on rlite but decline to comment until y know more about the material. at's where we've been for four years, Maurice hasn't been able to get be- d that step," says Smigie of Mitsui tsu Chemicals. But a break in this am may be in the offing. Sir Ronald son, a former chief scientist at the ense Ministry, who last year was re- ed by Ward as a marketing consul- , predicts a deal will be signed with- a few months. TransTechnology's mpson, for one, doesn't rule out a t venture on Ward's terms.

Now a portly 61, Ward is a stereotyp- garage-shop inventor. He began rching for a better flame-retardant stic after he learned a decade ago most deaths in airliner crash land- are caused by smoke from burning stics in the cabin. He hit upon the t forerunner to Starlite in 1986 but tinued to tinker with it until 1989. t's when he put a welder's torch to latest recipe—a brew of 21 polymers, amics, and additives—and failed to duce any smoke, let alone a hole. realized that I had a winner," he s.

Today, Ward spends much of his time eiving a steady stream of visitors, uding defense officials from NATO ntries and industrialists from as far ıy as Japan, at his modest house. So though, Ward has rejected their rtures. If he continues to stall, some erts believe that it's only a matter of e before other researchers hit upon rlite's recipe—and leave Ward holding bag.

By Fred Guterl in Hartlepool, England

SOFTWARE'S COMEBACK KID

As his Notes becomes a hit, Jim Manzi confounds his critics

Just 18 months ago, personal computer pundit Stewart Alsop called for Jim P. Manzi's resignation as chief executive of Lotus Development Corp. In his biweekly *PC Letter*, Alsop lambasted Manzi for letting Lotus' share of the spreadsheet market slide from 80% to 55%. He also dug into Manzi for losing too many key executives and staking the future of the company on "groupware," a new kind of software for networks. Recently, though, Alsop issued a retraction. "I was wrong," he wrote in a recent issue of *InfoWorld*. "I'm chewing [my words] as fast as I can."

He's not the only Lotus watcher who is doing a double take. All through 1991 and 1992, Lotus was Wall Street's favorite punching bag. Rampant executive turnover, late and bug-ridden software releases, and declining market share had bloodied the No. 3 PC software maker. From August, 1991, to September, 1992, investors bid down Lotus' stock from 41 to 17, knocking its market value from $1.7 billion to just $750 million. Manzi, who had been a management consultant before joining Lotus in 1983 to market the 1-2-3 spreadsheet, was roundly criticized for lacking the leadership and technological vision to keep pace with arch-rival Microsoft Corp. in the fast-changing software industry.

BIG LEAD. But it is precisely Manzi's vision and leadership, as critics such as Alsop acknowledge, that have put Lotus in position to take on Microsoft—and have helped nearly double Lotus stock to 36 since January. It was Manzi who in the late 1980s kept the Notes groupware program alive when others in the company wanted to cancel the project. Now, Notes is the clear leader in groupware, which allows teams of workers on a network to swap information and collaborate on projects. "This is the source of our long-term differentiation versus Microsoft," says Manzi.

While the groupware push laid the foundation for Lotus' long-term strategy, Manzi also worked hard over the past two years to shore up the existing business. He stabilized management, cleaned up product development, and brought out a new 1-2-3 for Microsoft's Windows system. The program has gotten strong reviews, and in the first quarter of 1993 Lotus' share of the Windows spreadsheet market jumped from 27% to 34%, while Microsoft's dipped from 63% to 56%, says International Data Corp.

MANZI FOUND A MENTOR AND HAS IMPROVED HIS IMAGE

Sound like a successful turnaround? Yes, but there's still one thing missing: rising profits. Price competition in Windows programs and a steep falloff in sales of programs that work with the

older MS-DOS software standard are hammering profits. With price pressure and the costs of acquiring Approach Software Inc., a maker of data-base software, analysts expect net income of half last year's $80 million. Indeed, after one-time charges for acquisitions and staff reductions, Lotus has only once surpassed its 1987 earnings level (chart)—even as revenues have more than doubled. Part of the problem is industry-wide, says Neal Hill, an analyst at Forrester Research Inc., who estimates that average gross margins in PC software are sinking from 80% to 60%.

Manzi claims that Notes will help Lotus fight that trend. "We're at the start of a very big new business cycle that has enormous implications for the company," he says. A well received new version of Notes, analysts say, should deliver $100 million in sales this year, up from $50 million in 1992. That will immediately help the bottom line, since Notes has scant competition and little price pressure. The package is now in use by more than 350,000 workers at 1,500 corporations, including Andersen Consulting, Coopers & Lybrand, and Unilever. In a soon-to-be announced deal, the European branch of General Motors Corp. is expected to buy Notes for all its white-collar workers.

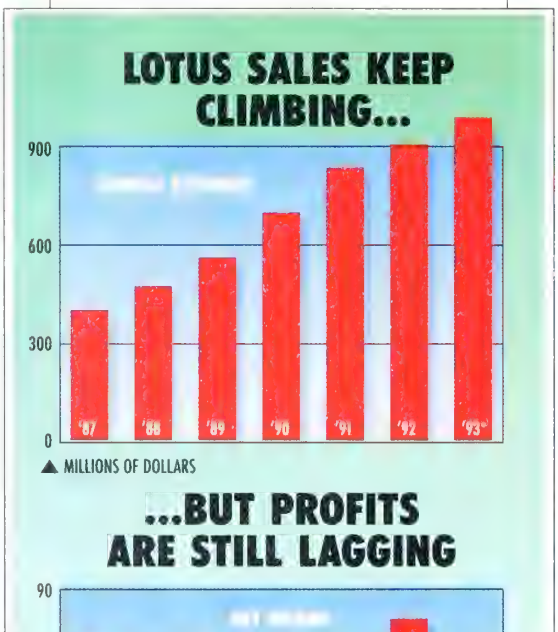
CONSISTENT. The surge of interest in Notes has Manzi thinking big. He predicts that it will bring in several hundred million in revenue annually in three to five years. More important, customers are using Notes to get different types of applications programs to exchange information across networks. "It manages consistency between very diverse applications," says Charles Neill, president of Logistics Solutions, a Waltham (Mass.) software company. Using Notes as the pathway, the company's programs for natural-gas distributors automatically steer pricing information over a network from several pipeline companies to help customers pick low-cost delivery routes.

Manzi predicts that Notes will one day control most of the document-management tasks that workers do on networks—from retrieving electronic news clippings to shuffling around sales reports to keeping track of a work group's schedules. In short, Manzi says, office workers will use Notes as their main program—to navigate through networks and use software and information stored on other computers.

One sign of how Notes is catching on in this role: Recently, software rivals such as Microsoft, WordPerfect, and Borland International have announced plans to make their programs work with Notes. Analysts figure these companies are at least 18 months away from fielding competitive groupware products. Meanwhile, Lotus has already adapted 1-2-3 and its word-processing and electronic-mail programs to work with Notes.

A more immediate boost for the Lotus bottom line could come from diversification. Over the past three years, Lotus has bought makers of data-base, word-processing, and electronic-mail packages. Along with Notes, these programs are finally reducing the company's dependence on spreadsheets, where revenue is flat and competition is fierce. Sales of 1-2-3 now account for only half of Lotus sales—down from 74% in 1990. And with this larger range of products, Manzi expects a less erratic future, since he'll have a steady stream of maintenance fees and upgrades from many product lines instead of one.

All of this has encouraged analysts to expect double-digit revenue and profit gains. They estimate that revenue will grow from $900 million to nearly $1 billion this year. Net income will decline in 1993—unless Lotus actually lects damages from a copyright infri ment suit it won against Borland, wi Borland plans to appeal. But earn should jump 75%, to about $80 mil in 1994. "Lotus has executed its pro strategy," says First Boston analyst Johnson. "I'm a believer the fina results will follow."



While revamping the company, Mc has also made a few personal chan Within the computer industry an Wall Street, the 41-year-old execu had developed a reputation for b abrasive. Once, at a meeting with Street analysts, he mocked t by claiming to have anticip their questions and rattling list of yesses, noes, and I won't before anyone could query Says an analyst who attended: was bragging that he was goin leave people unsatisfied."

MELLOW. Eventually, Manzi w back to his former employer, m agement consultants McKinse Co., for a mentor to act as his hind-the-scenes adviser on the points of being a CEO. Soon, his casm seemed to mellow. Instea having a reputation for driv away key executives, he has b able to attract managers with bi experience. Six of Lotus' 29 v presidents are former CEOs or p idents at other software compa These days, he's even known to up his sleeves and head for Lo kitchen to whip up Italian food overworked programmers.

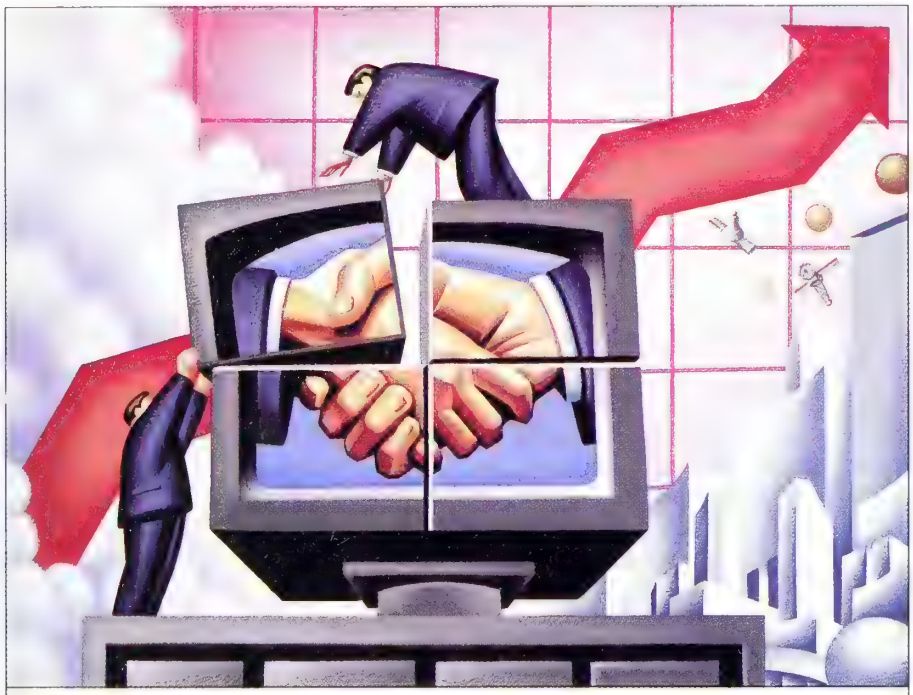
But being a nice guy and a g chef won't help fend off Micros More and more software these is being sold in "suites"—bundle four or five applications for one price. Microsoft's Office bundle outsells Lotus' rival SmartSuite 6 to 1, and Microsoft got 30% o $580 million in applications-softw sales from suites last quarter. W Lotus may be the player in the b position to take on Microsoft suites, it will be a rough fight. next version of Microsoft Office is " single most important thing we'll be ing next year," says Microsoft Se Vice-President Pete Higgins.

To keep Microsoft at bay, Manzi ho to get 50% of total revenues from sui up from 20% now. To do it, Manzi s he'll spend half his $50 million ann advertising and promotion budget push SmartSuites. If he can stand to Microsoft in the battle for bun and keep ahead in groupware, Ma should continue to deflate his critics

By Gary McWilliams in Cambri Mass.

RETHINKING THE COMPUTER

1993



INFORMATION TECHNOLOGY IN BUSINESS: THE NEW PARTNERSHIP

NCE WEEPING, OW REAPING

the beginning, the pioneers of ormation technology and the ons of business entered a comfort- concordat — the barons entrusted ir timid desire for a steady stream of ero-gadgets to hone their competi- edge; the pioneers promised ater efficiency, the automation of iness processes, and the elimina- of costly clerical heads. Implicit the pact was a clear and complete ineation of roles; the pioneers uld stick to their computing, the ons to their org charts.

IT is now thirtysomething and the IT/business concordat is cozier than ever, but the delineation of roles has changed and the payback remains elusive: After three decades of reptilian digestion of IT, businesses still wonder what they're getting from their IT dollar.

Today's changes in industry and business mirror realignments of biblical proportions in the wider world. Hegemony of any sort is fleeting, the Soviet Union, the Berlin Wall, IBM, and George Bush all cases in point. This geopolitically open world now informs the corporation. Old models no longer apply. New models beg for solutions from IT.

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Recently in New York City, the world's most creative and effective systems-responsible senior executives gathered at *Business Week*'s annual Rethinking the Computer symposium to discuss this fundamental reevaluation of business processes and to visit the solutions IT posits.

Donald Tapscott, vice-president of technology for DMR Group, Inc., and author of a book exploring the new relationship between business processes and information technology entitled *Paradigm Shift*, set the stage. "The multi-level, top-down, inwardly-focused, command-and-control hierarchy isn't working. In the new IT world, enterprises are networked, based on teams; their professionals work together in multi-disciplinary groups that cut across traditional org boundaries. It's not inwardly focused or turf conscious; it's open and outwardly focused on the customer or client."

Microsoft Chairman and Co-Founder **Bill Gates** offered a new guiding principal for IT solutions to business processes. "The idea is that rethinking the computer should empower individuals to have all the information they need right there, at their fingertips, all the time. This will enable users to provide better customer service, shorten product cycles, do any job more efficiently. The computer is the only tool up to the task. Companies will succeed or fail based upon how well they are able to take advantage of the information at hand."

MONEY FOR NOTHING?

Robert McDowell, Microsoft Corporation's vice-president of education & consulting services, says the stakes have never been higher. "Too much of today's automation just helps us do more of what we are already doing, but it can also mean if we're dealing with an organization that's making bad decisions, we're providing them with a tool to make more of those faster and quicker and go out of business sooner. But, managed properly, IT is the most capable catalyst for the rethinking of business processes so fundamentally necessary to achieve real reengineering, and that's what will ultimately lead us to the real payoff."

It's a payoff long overdue. During the 1980s alone, American enterprise sunk over $1 trillion into information technology. In brazen defiance of conventional wisdom, the meager harvest reaped was a comat annual productivity growth of 1%. Why?

"Too seldom do we consider adding adequate train and support into the IT cost," McDowell points out. "We putting horsepower on people's desks today that could h run whole companies four or five years ago. Yes, the vend are making it easier to use their stuff, but if it's so easy, w does every piece of software come with a big box to store that stuff that tells you how to use it?"

McDowell suggests that reaping the technology pay requires an increase, not a decrease in the cost of traini and support, and recommends that for every 50 users, c full-time staff member be hired to provide training or suppo

"From our standpoint, there is no cost at all to the tra ing," says **Dennis H. Jones**, Federal Express Corporatio senior vice-president for information and telecommuni tions, and chief information officer. "Of course you pay the materials, instruction, etc., but if you really focus on wh you're being trained on, then it actually saves costs in oth forms — your people perform more cost effectively, and t work gets done more quickly. It's not a matter of what traini costs, it's what costs you incur if you don't do the training."

CONSIDER THE SOURCE

Since the mainframe made the scene four decades ago, issu of training costs, systems maintenance, and outsourcing ha long taken a back seat to the compu-glitz side of IT. B **William Y. Tauscher**, chairman, pre dent, and CEO of ComputerLand, to the *Business Week* symposium th continued neglect of those issues cou mean the difference between realizi real gains in productivity throug successful reengineering, and simp throwing money out the window.

Tauscher cites the latest figur from the Gartner Group that sho the full cost of end-user computing p PC, including various support an operations expenses, has skyrocket to approximately $40,000 over a fiv year cycle. That number becomes eve more staggering when multiplied b the growing number of PCs in any larg corporation. "ComputerLand's ow installed base is now over 40,000 PCs

WILLIAM H. GATES

CHAIRMAN & CO-FOUNDER, MICROSOFT CORPORATION

"The goal is no longer just to get the machines running our operating systems, but also to get all the machines working together."

ıscher says. "That adds up to $150 million of cost. When 're dealing with numbers like that, the mundane guts of naging desktop computing costs can have a big affect on whole arena of IS, particularly productivity."

With the realization that the key to the return on IT investnt is reengineering comes the realization that pushing the ver of technology to the user also drives the cost of these ems even higher. "What is also clear," Tauscher says, "is t cost growth can be controlled. In fact, people who really about managing their end-user cost can cut it in half. it's a huge impact both in terms of the return equation l the IS equation."

Tauscher outlines a methodology. "First — figure out your t. Some do this on an ad hoc basis, some more thoroughly, ng outside expertise. I can't recommend enough a comte and total study of what the end-user costs are for your anization." Tauscher says a comprehensive examination of t must involve assessing skills, training needs, virus risk, et management, network capacity and operational func-ı, and the cost of legitimizing all your stolen software. ce those costs have been computed, he suggests running m against those of another company in your field in order obtain an accurate industry comparison.

The final step in assessing cost is to ask a couple of simple estions, 'Should we continue to do all this ourselves? What he most cost-effective option?' This is the fundamental ıcept of outsourcing: letting people with core competen-s in end-user cost control and desktop management do se jobs so you can focus on the higher end tasks associated ı reengineering the business.

VER, NEVER, NEVER LATE

leral Express is an impressive exple of IT success and demonstrates major theme of the paradigm shift tailoring IT to business functions. nnis Jones's massive global system s provided solutions far beyond omation.

"Our objective was to expand packe tracking. The only way we felt we ıld do it effectively was to pull the a collection point as close to the busis as we could." For Federal Express, it meant the hands of the couriers. e years ago Federal Express couriers gan emerging from their trucks ned with the IT solution to the critical oblem of tracking overnight packages. w, at the point of pick-up, packages are scanned with hand held computers, and scanned again seven times on the overnight journey to their final destinations. A computer in each Federal Express truck tracks every entry so that at any point from the moment of pick up all the way to delivery, the computer is able to pinpoint the package.

"The point is we were able to apply information techno logy to get closer to the customer. Technology is crucial to allowing us to be proactive to customer needs rather than reactive. We have to know the customer's problem before they know it. We have to find the solution to a problem before they even know they have it. If we wait for the customer to come to us; we're out of time."

Pushing the power of the computer out and into core business processes is quickly being recognized as essential to successfully reengineering the corporation. DMR's Tapscott identifies it as just one of the strategies that allows companies to exploit the new information paradigm. "Federal Express has improved quality by building an integrated organization based around an integrated computing architecture. What does that mean? It means your package is on time."

TECHNO-GLASNOST

Another development enabling IT users to reengineer for success is the shift to open systems. In the IT era of the '80s, every vendor had their own proprietary approach to everything. The customer bought technology and was locked into a lifetime partnership with a particular vendor. Vendors euphemistically called this 'account control.' Tapscott describes this period as "the IT infancy," and argues that it was only a matter of time before visionaries like Bill Gates arrived on the scene to liberate the customer.

Open systems, or standards-based architectures are systems software environments based on vendor-neutral standards. As a result, software applications become moveable, regardless of the brand or the size of the computer. "Open systems," Tapscott explains, "allow computers of different brands and sizes talk to each other, to interoperate." In an open systems environment, hardware becomes a commodity and software is portable, reducing the number of conversions and facilitating reusability. Users can reach out to customers and suppliers and bring together the islands of technology that previously existed in the organization.

"A key feature that Microsoft has brought to this area," says Gates, "is

DENNIS H. JONES

Senior Vice President for Information & Telecomunications & Chief Information Officer, FEDERAL EXPRESS CORPORATION

"The key is using information technology to get closer to the customer. Technology is crucial to allowing us to be proactive rather than reactive."

the concept of a standard operating system — an operating system that runs across many manufacturers' hardware. Today we take that for granted. But 10 years ago, none of the computer manufacturers would have thought that this was very interesting or even a very good idea. Yet the phenomenon that it has generated in terms of a wide variety of software at very low cost has really been even beyond what I expected when we first started putting this together. More and more, we're trying to hide the boundaries between individual applications."

This is the very goal that distinguishes the difference between the '80s era of information technology and the new era — to transcend the boundaries between the operating systems of rival makers and allow all the machines to work together.

Microsoft's upcoming Windows NT embodies this concept and provides capabilities across a wide range of computing equipment: PCs, with their low costs and wide variety of software; workstations, with their high power and reliability; and minicomputer or mainframe solutions. Any one of these three has its benefits. But previously no one had effectively pulled all of their features together.

"The goal is no longer just to get the machines running our operating systems," say Gates "but also to get all the machines working together."

THE LEAP OF FAITH

Revolutionary technological advances like open systems and standards-based architectures are converging with the recession-induced need to reassess fundamental business processes. The result is a new corporate paradigm. Information technology can provide the solutions, but it requires a leap of faith — an understanding of IT that transcends automation and incorporates IT capabilities in the wholesale reengineering of the most basic business processes. Organizations that understand the new role of IT in business have the chance to seize the lead in their industries. Those that don't will miss the on-ramp to future competitiveness, fall further behind, and cease to exist.

Illustration: Marco V. Kodan

WILLIAM Y. TAUSCHER

Chairman, President & CEO,
COMPUTERLAND CORPORATION

"People who really set about managing their end-user cost can cut it in half. That's a huge impact both in terms of the return equation and the IS equation."

A Quick Tally of Corporate Information Technology Decision Makers

BUSINESS WEEK's 1993 Rethinking the Computer symposium w a gathering of large corporation CIOs, EVPs/MIS, and the sen business-unit managers who actually use the IT that the syste chief provides. Using Quick Tally Interactive Systems audien response handsets, both groups anonymously offered insta insight into the changing applications of information techn logy in American enterprise.

How Am I Doing?

Senior management is paying closer attention to IS in 82% the corporations represented at the BUSINESS WEEK meeting, b IS performance is being measured at only 35%. That mea that, at many large firms, senior management does not ha access to any rigorous assessment of the performance of their investments. For delegates whose IS performance is measure 52% say the criteria are set by both the IS management a business unit management, 30% solely by IS management, a 19% solely by the business unit management — dramatica different approaches to tracking IS effectiveness.

Great Expectations

Sixty-two percent of BUSINESS WEEK Rethinking the Comput symposium delegates say IS is not meeting management expectations, and another 36% say they are just getting by. Or 2% are exceeding the goals set by management — little wond if 77% cannot articulate the impact of changes in informati technology on their corporation. But, hope springs eternal; overwhelming 70% of delegates belie IS holds the key to competitive advanta in the 1990s.

At What Cost?

Fifty-eight percent estimate their per-us cost of desktop computing at $25,0 over a five-year term; 25% estimate the cost is around $40,000, and 17% s their per-user cost is closer to $65,00 These are largely educated guesses sin only 9% of delegates have in fact do an end-user cost study — 91% have no To cope with end-user costs, 31% delegates have outsourced end-us training, 29% have outsourced system maintenance, and 24% have outsource configuration installation.

BUSINESS WEEK Executive Programs on-hall polling ma possible by Quick Tally Interactive Systems of Beve Hills, California.

HE YOUNG ND THE JOBLESS

ispects for youth are even grimmer than in past recoveries

When Leydis de la Cruz applied for a federally funded summer job last spring, she had hopes. The 16-year-old New York school student's family—including mother, sister, and four brothers—1 less than $12,700 a year, as reed. And the Clinton Administration said it planned to double the pron's funding, to $2 billion.

ut Congress authorized only $1.22 on. By the time the Administration an distributing the funds in July, York had told de la Cruz and 00 more of the city's 100,000 applis that they were out of luck. The y is the same across the ntry, where cities have ed away tens of thouis. "It looks like I'll have job this summer," lats de la Cruz.

teenagers seem hungrithan usual for work, e's a reason: While the of the economy picks steam, youth job pross are trailing badly—e than in any other re- recovery. True, work plentiful for anyone e days. And teens are ays hit harder in bad s and take longer to feel upturns. Still, while t employment has sured its prerecession peak 96.4 million jobs, employment of ng people is 2 million lower than in . Economists say two trends are at k: Productivity has jumped by more 3% since mid-1991, obviating the l to hire lots of workers. And the l of skill required for many jobs is bing rapidly, leaving unskilled young kers out in the cold.

SING WINDOW. These trends are ocing at a particularly bad demographnoment for America's youth. Alugh the spread of low-wage and -time jobs drove down their inflaadjusted pay in the 1980s, such jobs east were plentiful. Now, entry-level tions may remain scarce just as the 24-year-old age group begins growing again. After plummeting by 3.4 million, or 10%, since 1975, this group will swell by 3 million in the next decade, according to the Census Bureau. "The demographic window of opportunity for solving youth employment problems has closed," says Andrew Sum, a labor economist at Northeastern University.

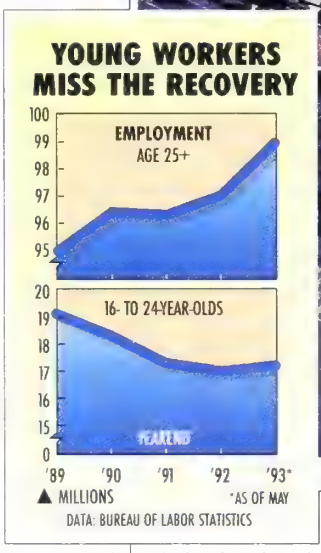
The past recession was extraordinarily damaging to the young for several reasons. Heightened competition spurred many industries into efficiency drives that often eliminated entry-level jobs. One of the hardest-hit occupations has been retailing, where old-line chains such as Sears, Roebuck & Co. have cut out thousands of clerical and sales jobs. This has dampened job growth in an industry that employs half of all teenagers and a quarter of workers in their early 20s. Just two years ago, the Bureau of Labor Statistics predicted there would be 25 million retailing jobs by 2005 vs. 20 million today. Now, experts say, the increase may be much less.

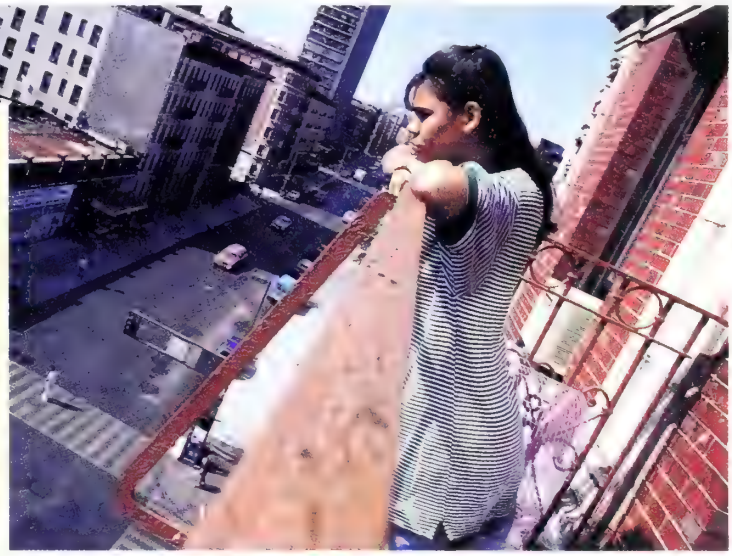
Beyond that, the spread of new technology is lifting more entry-level work out of the reach of the unskilled, particularly the young. Many employers say the trend will continue for years. According to a recent survey by Price Waterhouse, 75% of 316 top New York executives say most new entry-level jobs will require specialized training beyond high school or a college degree in the next four years. Fewer than 50% of all jobs require such training now. "New technology creates jobs, but at higher skill levels, which hits kids the most," says Nelson Smith, who heads a summer-job program run by the New York Chamber of Commerce & Industry.

SILVER LINING. Indeed, the outlook for young workers is so poor that many have simply stopped seeking work. Those who have pulled out aren't counted in the jobless rate, which has jumped from 15% for teens in early 1990 to 21% today. And only 37.6% of teens are employed today, down two percentage points since the start of the recovery in early 1991, according to the BLS. By contrast, the share of teens with a job jumped by nearly three points, to 42%, after the 1981-82 slump, says Sum. The share of adults who work—61%—is nearly the same as it was two years ago.

There may be a thin silver lining in the grim numbers. With jobs so scarce, more young people are staying in school. The proportion of 18- to 24-year-olds enrolled in college, which hovered around 30% for a decade, rose in the late 1980s and jumped sharply when the recession began. It hit 41% in 1991, the last year for which Census Bureau figures are available. "In an odd way, there's a positive light to the bad job market if it scares young people into attending college," says Robert Kominski, head of the bureau's education branch. More education will leave young workers better off in the long run. But that's small comfort for those who need a job now.

By Aaron Bernstein in New York





NO LUCK: FEDERAL CUTS LEFT LEYDIS DE LA CRUZ WITHOUT A SUMMER JOB

Roland A. Laferriere
Vice President, MIS Director (left)
and Herbert J. Zarkin, President

imagine no challenge being too big.

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The Law

HOW TO HANDLE NEIGHBORS FROM HELL

After waiting two years for the courts to resolve a boundary dispute with his neighbors in a suburban Chicago development, George Moser decided to take matters into his own hands. On May 7, he brought in a bulldozer to rip up a section of his neighbor's driveway that was built on his lot. According to a suit filed by Kenneth and Carla Pies, Moser shouted "keep on bulldozing," as Carla Pies screamed for the destruction to stop. The Pies are now seeking $1 million in punitive damages.

Neighbor disputes often have the distinctive flavor of bad comedy. But you won't find the parties involved laughing. "You start fighting with a neighbor, and it is like a marriage gone bad," says Bob Hauer, a personal-injury lawyer in Minneapolis. "But you can't divorce them because they live next door."

Small irritations, repeated over and over, can lead to increasing anger and violence, says Raymond Novaco, professor of psychology at the University of California at Irvine. The press is littered with horrifying tales of exaggerated responses to neighbors: On July 18, a Locust Valley (N.Y.) man stabbed to death the man who lived downstairs after complaining of a loud radio.

FEUDING OVER FIDO. But for people willing to do some legwork and be patient, there are civilized ways to resolve neighbor disputes. Everyone is entitled to "quiet enjoyment" of their home. There are laws in every city, town, and county to address problems that can arise between neighbors, says Cora Jordan, author of *Neighbor Law* ($14.95, Nolo Press, 800 992-6656). "Most of the laws are a lot stricter than we realize," she says.

Local ordinances are similar in many small towns and large cities. To deal with noise disputes, towns legislate decibel-level limits and quiet hours. Ordinances against blighted property can be invoked if your neighbor's yard is overgrown with weeds or filled with rusted auto parts.

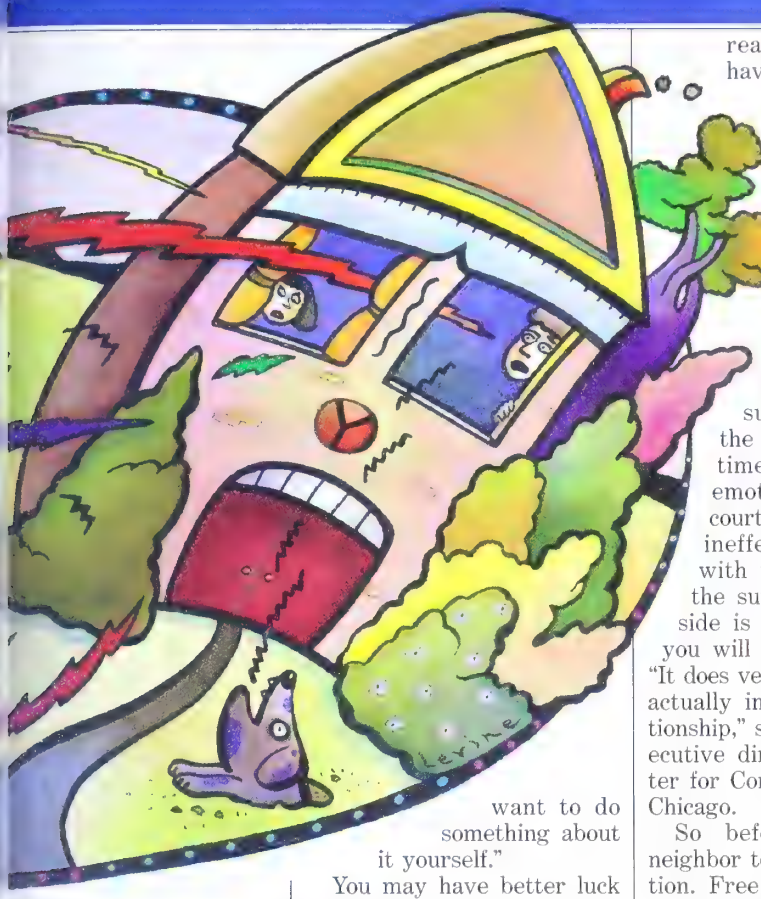
Is a tree the source of conflict? You can't force your neighbor to chop it down, even if it blocks your view or threatens to topple over onto your house. But you can trim branches or roots that reach into your property as long as you don't destroy the tree. Zoning laws limit the size of home businesses in residential areas to keep traffic and noise from disturbing neighbors. Local laws may also regulate the height, location, appearance, and material of fences.

POSSESSION. Pets, one of the biggest causes of neighbor disputes, are restricted by kind, number, and behavior. Most towns have leash laws and an animal-control officer to force owners to control and care for their pets. Boundary disputes arise most often when one person starts using a strip of a neighbor's land. Experts say property rights are worth protecting, even if you're not currently using the land. It should be noted that in most states, if your adjoining neighbors control some of your land and show all signs of ownership, the court may hold that they "adver possess" it after abou years, and now own it.

To check your local la call the appropriate gov ment agency or the t clerk's office. Better yet some research at the pu library or county law libr so you can make a copy the law. A librarian shoul able to assist you.

A much more detailed of rules and regulations cover your dispute if you in a co-op, condominium another "common-interest c munity." Sam Dolnick, pr dent of a condo associatio La Mesa, Calif., says ho owners' contractual obligat at his development incl maintaining quiet hours a 11 p.m. on weekends keeping pet ownership d to one cat or one dog—wh can't weigh more than pounds. "The trouble is, a of people don't read the g erning documents before t buy," he says.

Unfortunately, determin that you are on the right s of the law may do little to



solve your
ute. "Basically, you are en-
d to buy a home and live
and not have the couple
ı hell live next door and
your life," says Hauer.
e problem is that once you
involved in all these legal
es, they may ruin your
anyway."

e informal and diplomatic
n you first approach your
hbors about a grievance,
Jordan: "In the majority
ases, the neighbor doesn't
ı realize there is a prob-
." If a casual approach
, write your neighbors a
ıal letter, citing the ordi-
ce they are violating and
osing a copy. Consider
ng a lawyer draft the let-
for extra impact.

IT OUT. You can also try
ng local authorities. These
s are very low priority,
the police may respond
ıeighbor disputes and at-
pt to mediate the situa-
. Code-enforcement offi-
should be on hand to
l with zoning or public-
ty issues. But basically,
Jordan, "the law is on
books to aid you if you
want to do
something about
it yourself."

You may have better luck with town officials if your entire neighborhood is calling for action. Talking to other neighbors about the issue can also have therapeutic benefits. "It validates your own reactions when you have support," Novaco says. "It can also help a person put things in perspective. You can test out to what extent you are reacting in an exaggerated way."

Only if all else fails should you sue. Not only is the process expensive, time-consuming, and emotionally draining, courts have also proven ineffective at dealing with these cases. Once the suit is over and one side is named the victor, you will still be neighbors. "It does very little in terms of actually improving the relationship," says Jon Weiss, executive director of the Center for Conflict Resolution in Chicago.

So before taking your neighbor to court, try mediation. Free dispute-resolution services intended to keep minor disputes from clogging courtrooms are available across the country. The American Bar Assn. directory lists 420 not-for-profit programs and hundreds of private practitioners who will mediate disputes for a fee. The ABA section of dispute resolution operates a resource center that offers basic advice as well as referrals to mediation services. Call 202 331-2258.

JOINT AGREEMENT. In cases where disputes are mediated, parties are able to come up with written agreements 80% to 90% of the time, says Prudence Keftner, associate director of the ABA dispute-resolution section. About 95% of the disputants abide by the agreements, she says, while judges' orders are complied with only about 40% of the time. "The point is that the two parties understand best what is right for them," she says. The drawback is that both parties must agree to go through the process. The great majority of mediated cases today are referred by the court when the dispute has already resulted in a misdemeanor charge, such as trespassing or assault. Only about 10% of the time will the other party submit to mediation when their neighbor approaches the center voluntarily, says Weiss.

For some people who aren't reasonable, says Jordan, "the only thing that works is to hit them in the pocket." If your neighbors have adopted the familiar "let 'em sue me" approach, go ahead and file. The cheapest way is to go to small-claims court, where you don't have to hire an attorney and claims are limited to a few thousand dollars. If others in your neighborhood join you, the claims can add up, providing strong incentive for your neighbor to comply with the law.

If filing a civil suit seems the only means for redress, be ready to show a lot of patience. Attorney Hauer has seen clients grow so angry and upset over an ongoing neighbor dispute that he has suggested they put the matter behind them and relocate. It's a better option than letting an uncooperative neighbor destroy your mental health. *Amey Stone*

WORKING IT OUT WITH THE JONESES

TALK TO YOUR NEIGHBORS Assume they don't know they are disturbing you and would change their behavior if they did.

CHECK THE LOCAL LAWS Do research at the public library, call the appropriate town office, or check with your condominium or neighborhood association to make sure you're on the right side of the law.

WRITE YOUR NEIGHBORS A LETTER Describe the problem and enclose a copy of the appropriate law. Consider having a lawyer draft the letter for added impact.

CALL IN THE AUTHORITIES Although neighbor disputes are low priority, the police or another town official might respond, warn the offenders, and issue fines.

ORGANIZE THE NEIGHBORHOOD You will get better response from local authorities if others are complaining, too.

TRY MEDIATION Professional dispute-resolution services recommended by the local court or bar association can keep you from wasting time and money in court.

SUE, IF YOU MUST Go to small-claims court or, for larger claims, to civil court. Remember, judges hate these cases, costs can be high, and you'll still live next door to the person.

DATA: BUSINESS WEEK

Insurance

WELLNESS CAN MEAN A TRIM BOTTOM LINE

In a game of word association 10 years ago, the term "wellness program" might have elicited such responses as West Coast, yoga, and granola. But now that wellness programs have spread through mainstream businesses, no-smoking policies, exercise programs, and employee physicals are more what come to mind.

Now you can add insurance discounts to the list. Several major insurers are reducing group-life premiums for companies that offer some type of wellness program to their workers. The insurers are responding to an established fact—that corporate wellness programs help save on medical bills. And healthier employees live longer.

Among the insurers cutting rates on group-life coverage are Metropolitan Life, Prudential, John Hancock, Travelers, and Aetna. "It becomes a way for insurers to reduce their price to be more competitive," says David Wilson, a principal at benefits consultant A. Foster Higgins.

Small businesses with 25 or more employees are finding that the policy can help rein in growing benefits costs. Babson Bros., a dairy-farm-equipment maker in Naperville, Ill., saved $5,000, or 5%, on its group-life premiums this year because it has a no-smoking policy and fitness programs.

DEDUCTIBLE BREAK. A wellness program doesn't have to be elaborate or costly. If a company has a no-smoking policy, that can be enough to earn a rate cut. Also eligible with some insurers are smoking-cessation courses, fitness programs, stress-management seminars, nutrition or weight-control classes, and back care.

Babson rewarded eligible workers who reduced their blood pressure, weight, or cholesterol levels by 20% with lower health-insurance deductibles. It also picked up half the tab for those who attended a smoking-cessation course and the other half if they quit smoking for six months.

As a result, Sun Life of Canada gave Babson the 5% premium break. "We want to recognize and do business with employers who vi healthy workers," says L Robert, director of grou products for Sun Life's operations. The ins shaves up to 3% off for s ing-cessation programs 2% for fitness plans.

If your company do have a wellness progra wouldn't take much effo enact a policy that would ify for a group-life disco The premium saved shoul set costs. And that's he business. *Chris K*

Smart Money

CASINO STOCKS: NO REASON TO FOLD

Place your bets: Do any jackpots remain among gaming stocks? After all, the group has been dishing out winnings for two years, and some market watchers think it's too late to get in. Several gaming stocks carry weighty multiples, and many analysts worry about an oversupply of venues. Six states now have or will soon allow riverboat or dockside casinos. Some 150 Native American tribes in more than 20 states have signed or are negotiating casino gaming compacts. And in Las Vegas, Circus Circus Enterprises, Mirage Resorts, and MGM-Grand will soon launch grandiose new theme-park casinos.

Yet odds are the public's insatiable appetite for gambling can elevate some stocks. Nowadays, parents can take the kids along on a gambling vacation. That's a key reason some analysts believe Luxor and Grand Slam Canyon, the two new Circus Circus properties, should help propel the company's shares, which have lagged recently. In Vegas, many also favor Caesars World, a leader among high rollers yet one of the cheapest gaming stocks around. Its recent price-earnings ratio was 14. Caesars has scored with Forum Shops, a huge mall situated next to the casino.

Shares of Promus, a casino entertainment and hotel company, are trading at dizzying multiples—its p-e ratio (on trailing earnings) is 86. Yet Morgan Stanley analyst Kurt Feuerman remains a bull. He figures earnings will reach $2.10 a share next year, up from an estimated $1.20 in 1993. Promus is wagering on land-based casinos (Harrah's), riverboats, and Indian gaming. The company holds a 20% stake in Sodak Gaming Supplies, which distributes slot machines made by International Game Technology to Native American casinos. IG the market leader in slo and another pricey stock Feuerman's buy list.

HEAVY TRAFFIC. Since last a dozen new public gam companies have been b with many far outpacing rest of the market in ini public offerings. But stocks have been volatile. chael Mueller, an anal with Montgomery Securit fancies Primadonna Reso a recent IPO. The comp owns the Whiskey Pete's Primadonna casino hotels, either side of Interstate in Stateline, Nev. Alrea about a quarter of the c cruising the California Vegas highway have b stopping at one of the sorts, and Mueller expe the number to rise once new Las Vegas attracti are completed. Primado claims another lucky adv tage: Motorists who have use the bathroom must w through the casinos to there. *Edward B*

BETTING ON GAMING STOCKS

Company	Stock price*	Price/ earnings*	Est. 1993-1994 earnings per share
CAESARS WORLD	43½	14	$3.31-3.62
CIRCUS CIRCUS	37¼	26	$2.57-3.41
INTL. GAME TECH.	34⅝	40	$0.78-1.07
MIRAGE RESORTS	44¾	36	$2.02-3.14
PROMUS	58½	86	$1.15-1.80

*Trailing 12-month earnings as of 8/2/93

DATA: GAMING & WAGERING BUSINESS/RAYMOND JAMES, INFOVEST

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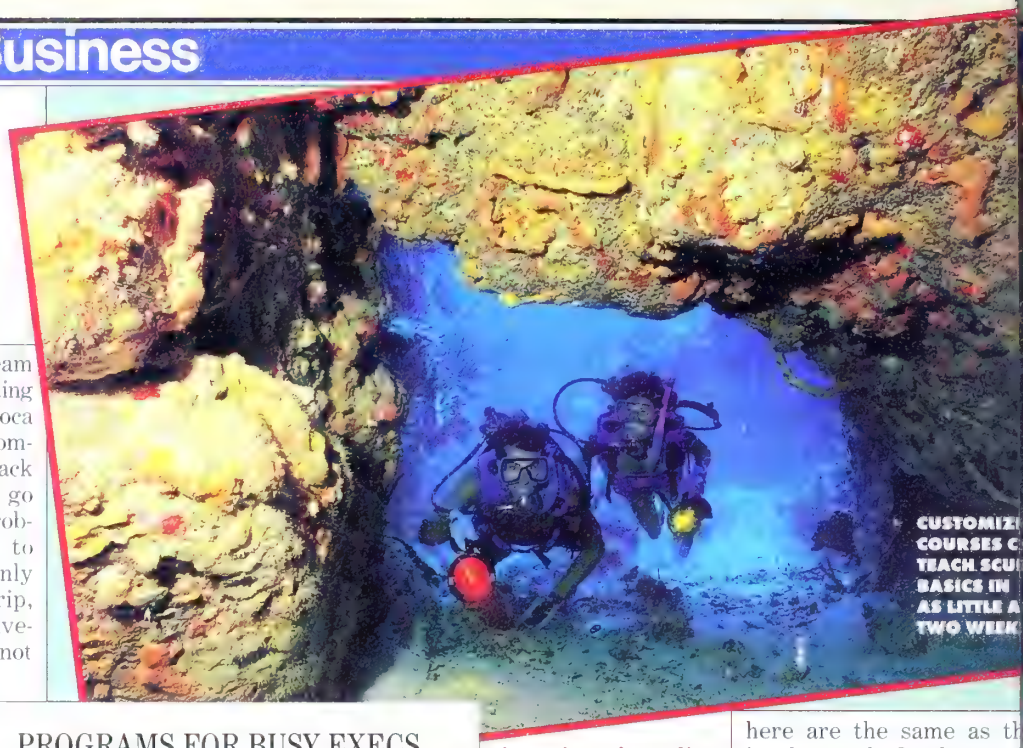

CUSTOMIZ
COURSES C
TEACH SCU
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AS LITTLE A
TWO WEEK

It sounded like the dream business trip. After jetting to a posh resort in Boca Raton, Fla., to cover a commodities convention, I'd tack on two days at the end to go scuba diving. Just one problem: I didn't know how to scuba dive. And with only two weeks before the trip, conventional four- to twelve-week scuba classes were not an option.

Out of luck? Hardly. Thanks to home video and the willingness of scuba shops to cater to erratic schedules, would-be divers too busy to sit in on regular classes can still safely make their way under water—if they sign up for a custom-tailored executive scuba class. At prices of $250 and up, executive courses cost roughly double the rate for group instruction. Students also pay about $30 for books and must own fins, snorkel, and mask. The open-water portion of training can cost extra, too, often $100 or more for equipment rental and boat fees.

HOMEWORK. The personalized format allows for flexible scheduling and individualized attention. "The people who do this are busy professionals or medical people on call or people in the arts who have erratic schedules," says Lorraine Nelson, instructor at Pan Aqua Diving in New York, which charges $450 for executive classes, vs. $250 for group lessons. Most shops accommodate unusual time demands at no extra cost, but Sport Chalet in Los Angeles charges tough-to-schedule customers $1,500.

Executive courses contain all the information conveyed in the standardized program formulated by certifying bodies such as the Professional Association of Diving Instructors. The key difference: Students watch videos at home and are required to do more homework, so that the classroom and pool work can be completed in two four- to six-hour sessions. Certification is necessary for more than just safety's sake. Reputable dive shops require proof that a program is certified before they allow students to rent equipment or schedule dives.

Here's how personalized executive classes get. I finished my last session at 11 p.m., eating Chinese food with my instructor from Scuba Systems of Skokie, Ill., while proving to him that I could correctly read charts that should prevent me from contracting the dreaded and dangerous "bends" that divers get when they rise to the surface too quickly. During instruction in the dive shop's well-heated pool, I watched an instructor hurry my classmate through his session so he could make a plane.

Classroom work focuses on the science of the sport: the effects of underwater pressure, the danger of tides, the protocols of safe diving. In the pool, I learned to don, use, and doff my tank, buoyancy vest, and weight belt. And I learned how to respond in emergencies, with a heavy and sometimes ominous emphasis on out-of-air scenarios. No daydreaming here. Something about the concept of being 50 feet under water with no air rivets your attention.

Once I completed the classroom and pool training, I was ready for the required five open-water dives. The skills here are the same as th in the pool. Students c their masks of water, lear share air with an out-of buddy, and make an emer cy ascent, holding their bre through 30 feet of water. the waters of a lake or oc are far different—and car much more intimidating—t those of a pool.

For me, the dream busi trip didn't work out. Sn craft warnings in Florida s tled my plans. Instead clear-blue Atlantic salt wa with 100-foot visibility, I to train in a flooded qua in northern Illinois, with ibility of 20 feet. On my f dive, instructor Clive Bas poured Cheez Whiz into hand, and we fed the doz of panfish that circled aro us. I felt a ticklish tuggin my ear and turned to se six-inch bluegill dart awa laughed, and a bouquet bubbles floated to the surf I was hooked. *David Grei*

PROGRAMS FOR BUSY EXECS

Name	Phone number	Price
DIVERS UNLIMITED Hollywood, Fla.	305 981-0156	$250
PAN AQUA DIVING New York	212 496-2267	$450
SCUBA SYSTEMS Skokie, Ill.	708 674-0222	$300
SPORT CHALET Los Angeles	310 657-3210	$750 to $1,500

DATA BUSINESS WEEK

Worth Noting

■ **EASY AUCTIONS.** To attract smaller investors to assets from failed savings and loan associations, the Resolution Trust Corp. will be auctioning nonperforming loans, grouped by area, in packages as small as $200,000. The first such auction will take place Aug. 24 and 25 in Kansas City, Mo. Call auctioneer & Associates at 800 525-07

■ **GREEN TEENS.** Socially c scious teenagers who wan exercise purchasing power pick up *Students Shopping a Better World.* This gui from the Council on Econo Priorities, ranks companies environmental, hiring, and closure policies. Copies c $7.49 each and can be orde by calling 800 729-4237.

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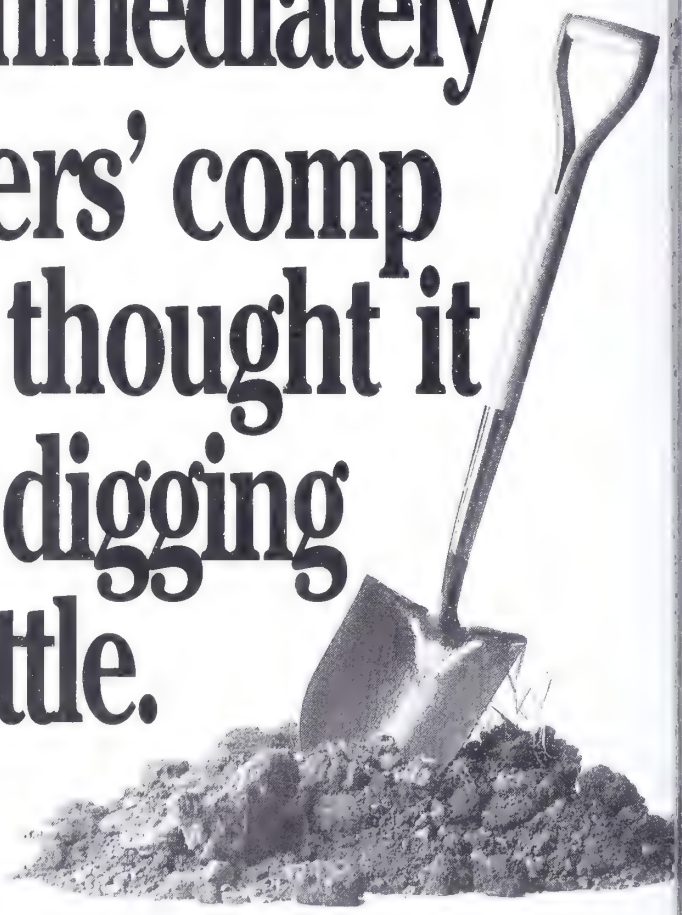
TRUE STORY #37

When 8 gardeners quit and immediately filed workers' comp claims, we thought it was worth digging around a little.



To the trained eyes of our State Fund adjusters, the workers' comp claims of eight disgruntled gardeners all looked dubious. Especially since the workers were using the same lawyer and medical mill, and claiming suspiciously similar "injuries." So we weren't surprised when our investigation failed to unearth any bona fide ailments—unless you counted the chips on the gardeners' shoulders.

By aggressively challenging the claims before the Workers' Comp Appeals Board, we were able to get all eight of them thrown out—at a savings of almost $100,000. Since then, we've passed our findings along to the local district attorney for possible prosecution of the individuals involved.

Unusual? Not for State Fund. Our entire network of adjusters and investigators is committed to weeding out dishonest claims, whether they're abuses of the system or out-and-out fraud. To get the full scoop on the gardeners—and find out more about preventing fraud in your workplace—give us a call.

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114F-CA

dex to Companies

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th a significant reference to a company. Most
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You can help stop this senseless destruction. Right now you can join The National Arbor Day Foundation, the world's largest tree-planting environmental organization, and support Rain Forest Rescue.

When you join, you will help establish natural rain forest barriers to stop further burning and support on-site conservation management plans to protect threatened forests.

Each and every second, a rain forest area the size of a football field goes up in smoke. You'd better call now.

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ENTARY

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, equity investors cheered.
ecause the breakdown in
will allow interest rates to
wn and help jump-start re-
acked economies across
inent. German stocks
.5%, British nearly 2%,
ch equities over 3%.
e stocks rallied as well. In
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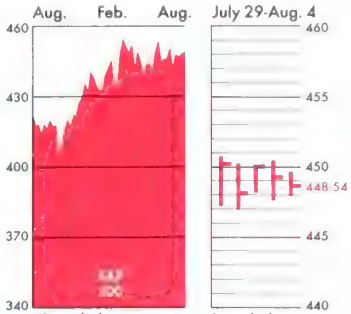
ay be ready to rocket.

STOCKS

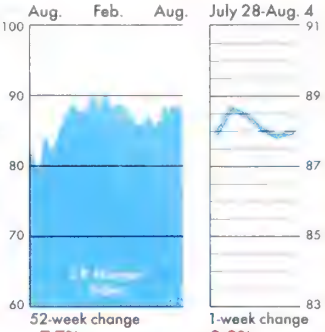


52-week change **+6.2%** 1-week change **+0.3%**

BONDS

52-week change **+9.0%** 1-week change **+0.8%**

THE DOLLAR



52-week change **+7.7%** 1-week change **0.0%**

RKET ANALYSIS

OCKS	Latest	% change Week	52-week
NES INDUSTRIALS	3552.1	0.0	5.6
COMPANIES (S&P MidCap Index)	169.0	1.3	16.0
OMPANIES (Russell 2000)	238.5	1.1	22.6
PANIES (Russell 3000)	259.1	0.5	9.1

N STOCKS	Latest	% change (local currency) Week	52-week
(FINANCIAL TIMES 100)	2941.3	2.0	22.9
NIKKEI INDEX)	20,497.6	3.4	28.2
) (TSE COMPOSITE)	3988.5	1.7	17.1

FUNDAMENTALS	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.15%	3.15%	3.23%
30-YEAR TREASURY BOND YIELD	6.55%	6.65%	7.43%
S&P 500 DIVIDEND YIELD	2.79%	2.79%	2.90%
S&P 500 PRICE/EARNINGS RATIO	22.8	21.3	24.6

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 26-week moving average	446.2	445.9	Positive
Stocks above 26-week moving average	58.3%	55.8%	Negative
Speculative sentiment: Put/call ratio	0.49	0.51	Positive
Insider sentiment: Vickers sell/buy ratio	2.25	2.32	Neutral

USTRY GROUPS

BRIDGE INFORMATION SYSTEMS INC

WEEK LEADERS	% change 4-week	52-week	Strongest stock in group	% change 4-week	52-week	Price
EBUILDING	11.4	37.8	KAUFMAN & BROAD HOME	12.2	35.0	20 3/4
.S AND MOTELS	10.5	83.8	PROMUS	21.7	308.6	59 1/2
SPORTATION SERVICES	10.3	26.4	PITTSTON SERVICES GROUP	34.4	39.8	21 1/2
NSURANCE	9.8	28.2	LINCOLN NATIONAL	12.7	33.8	43 1/4
ISHINGS AND APPLIANCES	9.5	26.9	WHIRLPOOL	12.9	59.1	63 5/8

WEEK LAGGARDS	% change 4-week	52-week	Weakest stock in group	% change 4-week	52-week	Price
REL MANUFACTURING	−13.8	−21.3	LIZ CLAIBORNE	−25.5	−35.2	23
	−11.6	18.1	USX-U.S. STEEL GROUP	−28.1	1.8	28 1/2
PUTER SYSTEMS	−10.6	−41.6	APPLE COMPUTER	−24.7	−38.0	29
RTAINMENT	−7.1	7.4	WALT DISNEY	−8.3	3.8	37 3/8
EHOLD PRODUCTS	−6.9	−5.6	COLGATE-PALMOLIVE	−11.2	−3.3	50 3/4

TUAL FUNDS

MORNINGSTAR INC

RS

k total return	%
ED SERVICES WORLD GOLD	11.1
MAN, DEAN	10.2
GTON STRATEGIC INVESTMENTS	8.9

total return	%
GTON STRATEGIC INVESTMENTS	108.5
. MIDAS GOLD SHARES	75.0
ED SERVICES WORLD GOLD	72.8

LAGGARDS

Four-week total return	%
STEADMAN OCEANOGRAPHIC TECHNOLOGY	−8.6
FRANKLIN GLOBAL HEALTH CARE	−4.4
OPPENHEIMER GLOBAL BIO-TECH	−4.4

52-week total return	%
INVESCO STRATEGIC HEALTH SCIENCES	−17.8
FIDELITY SELECT HEALTH CARE	−15.7
FIDELITY SELECT MEDICAL DELIVERY	−12.6

ATIVE PORTFOLIOS

DRI/McGRAW HILL

amounts
ent the present
f $10,000
d one year ago
portfolio

ages indicate
total returns

Foreign stocks	Treasury bonds	Gold	U.S. stocks	Money market fund
$14,139	$12,073	$11,495	$10,889	$10,231
+3.13%	+1.67%	+2.91%	+0.23%	+0.05%

on this page are as of market close Wednesday, Aug. 4, 1993, unless otherwise indicated. Aug. 3. Mutual fund returns are as of July 30. Relative portfolios are valued as of Aug. 3. A more detailed
roups include S&P 500 companies only; performance and share prices are as of market close explanation of this page is available on request.

NO PAIN, NO GAIN ON THE DEFICIT

Bitter medicine isn't easy to take, and America is about to swallow a big dose in the form of tax hikes and spending cuts to reduce the budget deficit. Worse, the medicine is being dispensed by a Congress that has just put on another unseemly performance. There was the spectacle of Senator Russell D. Feingold (D-Wis.) holding the entire deficit-reduction package hostage to ban some milk-inducing hormone in cows. And there was Senator Kika de la Garza (D-Tex.) protecting angora goatherders. Even Senator Bill Bradley (D-N. J.), who's smart enough to know better, demanded special breaks for drug companies from his state doing business in Puerto Rico. No wonder P. J. O'Rourke's book describing Washington politics, *Parliament of Whores*, became a best-seller.

But the fact remains that there is no real alternative to the plan. America must get its fiscal house in order to set the stage for future economic growth. Just the possibility of Congress passing the $500 billion package has prompted a bond market rally that has dropped long-term interest rates over a full percentage point since the election. Those 120 basis points have pumped about $100 billion into the economy, cut borrowing costs for corporations dramatically, set off a capital spending boom, and started clearing the real estate market. Passage of the deficit bill is probably good for an additional half to a full point cut on long bonds, offsetting much of the coming fiscal drag.

Cassandras are overestimating that drag anyhow. Despite the howls of pain, this is a very modest deficit-reduction a age. Instead of the deficit being $300 billion in 1998, be about $175 billion. This is a $125 billion difference economy that is already running at $6.5 trillion. That exactly Tyrannosaurus rex stalking the landscape!

And the tax changes are not that frightening, either working poor will get a good boost from expanding the e income tax credit. The middle class escapes virtuall scathed, thanks to the torpedoing of any serious gas tax. $180,000-and-up families will find themselves paying But their accountants are undoubtedly savvy enough t part of their income into capital gains, which are now more attractive thanks to higher personal rates on e income.

Despite all the carping and widespread whining, th no politically acceptable alternative to the deficit-red bill, however imperfect it may be. Senator Bob Dole (R- has not presented a realistic alternative that details where he thinks spending should be cut. Even if he di cuts would be as politically unpopular as the current pro tax hikes, and the same horde of special interests woul against them in the halls of Congress. Criticizing fro sidelines is an easy game to play.

The fact remains that if the U. S. is to grow in the and generate the kinds of jobs Americans need, the must come down. It's time to share a little sacrifice fo good of the nation.

GERMANY'S MOST-NEEDED EXPORT? LEADERSHI

The conventional wisdom: The crack-up of the European Monetary System did everyone a favor by freeing the French franc from the tight grip of the German mark. With the franc and other weaker currencies floating downward, many European governments will soon lower interest rates, pump up economic growth, and start creating jobs again. Germany will benefit through increased exports to France and other countries. So will the U. S.

This view is right, but only for the very short term. Unification stresses are bloating Germany's budget deficit to 7.5% of gross national product (compared with 4.5% for the U. S.), keeping rates at Alpine levels. So the foreign exchange markets forced the bureaucrats to acknowledge that Germany cannot lead Europe for the time being. Exporting deflation and driving half the Continent into a long, deep recession to control its own unique inflationary pressures is not acceptable to other Europeans. First, the pound and lira dropped out. Now, the franc. For all practical purposes, the mark and the tight monetary policies that go with it are disengaged.

There is great economic and political danger, however, if the split continues. It wasn't too long ago that Europe was awash in beggar-thy-neighbor competitive currency devaluations. In the 1960s and '70s, governments went their divergent ways on interest-rate policies and trade restrictio is easy to forget that the open European capital and markets that corporations and banks now take for gr didn't exist a decade ago. Only when France and West many set up the EMS in 1979 did fiscal and monetary cies begin to converge, cutting inflation throughout Eu Nearly all the breakthroughs in opening up markets occu within a relatively strict monetary union, now torn asu

It may very well be that these open markets now h life of their own and will provide the discipline necessar economic growth. The liberalization of the capital ma and the end to nearly all foreign exchange controls have it impossible for central bankers alone to dictate Euro money policy. With open borders, trade is growing, co tition is increasing, and European corporations are res turing. Economic union is taking place without benefit of h handed edicts from Brussels-based Eurocrats.

The big question is whether it can continue moving ward without the steadying hand of strong German fisca monetary leadership. Europe and the U. S. need Germa get its domestic problems straightened out as quickly as sible and to return to addressing European-wide issues. is not the time to be otherwise engaged.

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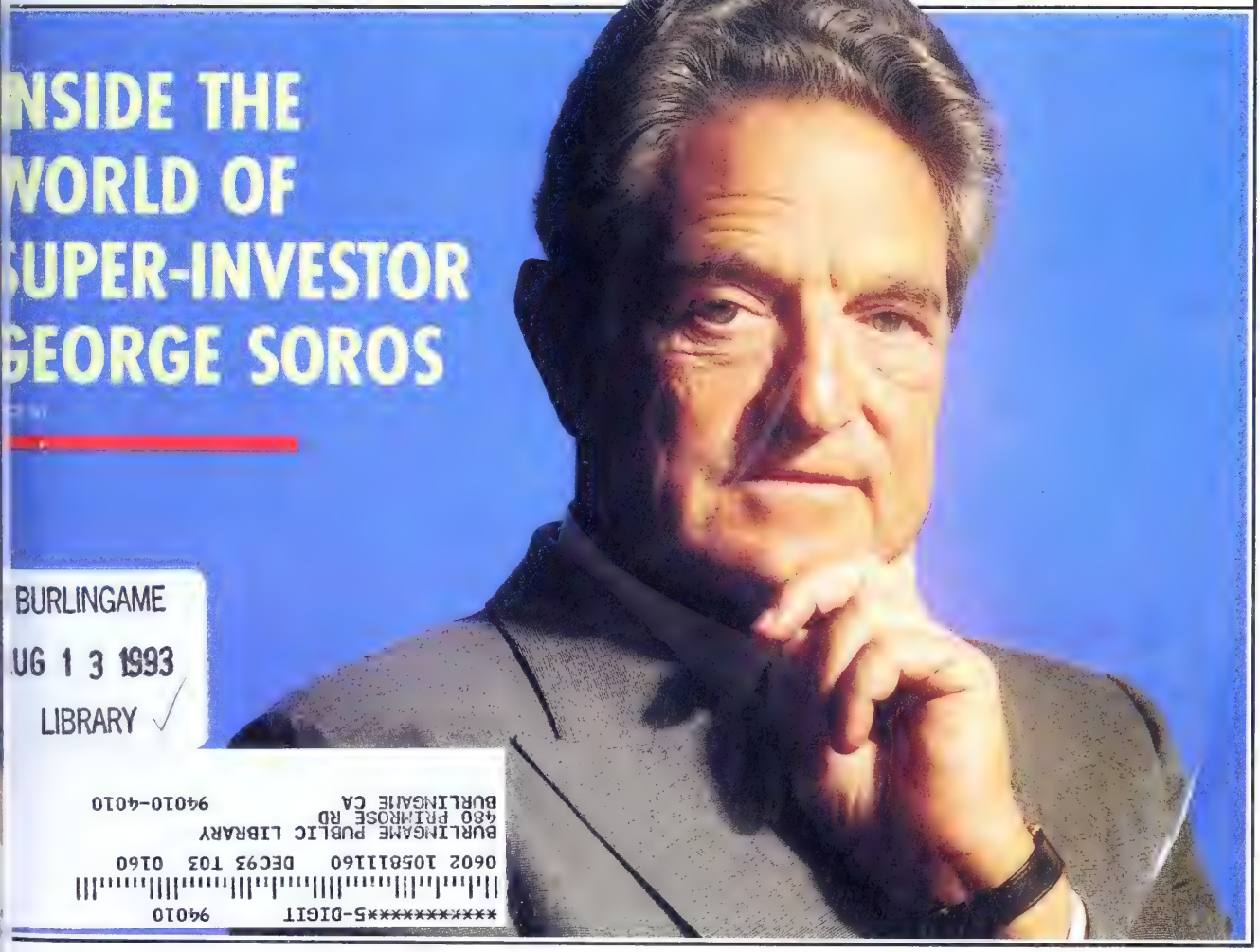

INSIDE THE WORLD OF SUPER-INVESTOR GEORGE SOROS

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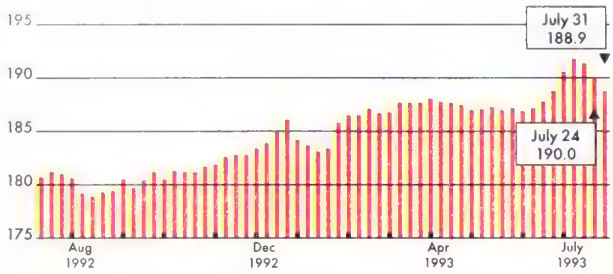
BusinessWeek Index

PRODUCTION

Change from last week: −0.6%
Change from last year: 4.5%

1967=100 (four-week moving average)

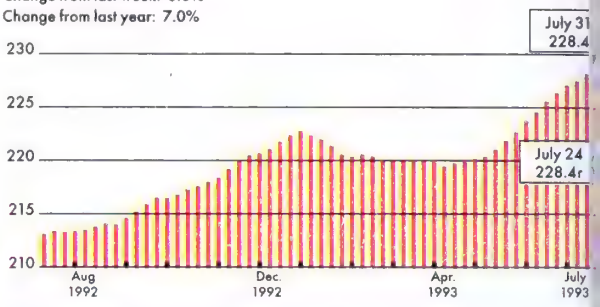


The production index fell in the week ended July 31 as the effect of heavy utility output during the heat wave works its way out of the four-week average. In the latest week, seasonally-adjusted output of coal and steel fell, partly reflecting the flooding in the Midwest. Auto and truck production jumped sharply, however, while electric power, paperboard, and lumber posted smaller gains. Crude-oil refining and rail-freight traffic were unchanged. The unaveraged index rose to 189.3 from 185.8.

BW production index copyright 1993 by McGraw-Hill Inc

LEADING

Change from last week: 0.0%
Change from last year: 7.0%



The leading index held steady in the week ended July 31, following sev weeks of steady gains. Stock prices climbed higher, and bond yields continued decline. Other pluses: The pace of real estate loans picked up a little, failures large businesses fell, and materials prices fell, but at a slower rate. The c negative: Initial claims rose. Before calculation of the four-week moving average, index increased to 228.0 from 227.2.

Leading index copyright 1993 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (8/7) thous. of net tons	1,825	1,826#	5.4
AUTOS (8/7) units	107,875	70,914r#	21.3
TRUCKS (8/7) units	89,421	65,621r#	20.0
ELECTRIC POWER (8/7) millions of kilowatt-hours	66,316	70,250#	4.5
CRUDE-OIL REFINING (8/7) thous. of bbl./day	14,157	14,043#	1.8
COAL (7/31) thous. of net tons	16,603#	17,632	−9.6
PAPERBOARD (7/31) thous. of tons	836.4#	821.1r	2.1
PAPER (7/31) thous. of tons	780.0#	777.0r	0.9
LUMBER (7/31) millions of ft.	473.1#	448.3	−1.9
RAIL FREIGHT (7/31) billions of ton-miles	20.2#	21.2	−0.5

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA[1], SFPA[2], Association of American Railroads

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (8/11)	103	104	126
GERMAN MARK (8/11)	1.71	1.71	1.46
BRITISH POUND (8/11)	1.47	1.50	1.93
FRENCH FRANC (8/11)	6.02	5.90	4.95
CANADIAN DOLLAR (8/11)	1.30	1.28	1.19
SWISS FRANC (8/11)	1.52	1.50	1.31
MEXICAN PESO (8/11)[3]	3.120	3.109	3.099

Sources: Major New York banks. Currencies expressed in units per U.S. dollar, except for British pound expressed in dollars

PRICES

	Latest week	Week ago	% Change year ago
GOLD (8/11) $/troy oz.	376.000	402.650	8.4
STEEL SCRAP (8/10) #1 heavy, $/ton	112.50	118.50	27.1
FOODSTUFFS (8/10) index, 1967=100	209.0	208.5	5.1
COPPER (8/7) ¢/lb	91.5	91.3	−20.8
ALUMINUM (8/7) ¢/lb.	57.1	56.5	−5.6
WHEAT (8/7) #2 hard, $/bu.	3.23	3.36	0.9
COTTON (8/7) strict low middling 1-1/16 in., ¢/lb.	55.02	55.79	−8.7

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, *Metals Week*, Kansas City market, Memphis market

LEADING INDICATORS

	Latest week	Week ago	% Ch year
STOCK PRICES (8/6) S&P 500	448.95	448.60	
CORPORATE BOND YIELD, Aaa (8/6)	7.04%	7.14%	–
INDUSTRIAL MATERIALS PRICES (8/6)	95.3	95.1r	
BUSINESS FAILURES (7/30)	334	355	–
REAL ESTATE LOANS (7/28) billions	$400.7	$400.6r	
MONEY SUPPLY, M2 (7/26) billions	$3,483.1	$3,482.4r	
INITIAL CLAIMS, UNEMPLOYMENT (7/24) thous.	396	351	–

Sources: Standard & Poor's, Moody's, *Journal of Commerce* (index: 1980=100), Dun & street (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally a data on business failures and real estate loans

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Ch year
BUSINESS WEEK PRODUCTION INDEX (July)	188.9	190.0	
BUSINESS WEEK LEADING INDEX (July)	228.4	228.4r	
EMPLOYMENT, CIVILIAN (July) millions	119.3	119.2	
UNEMPLOYMENT RATE, CIVILIAN (July)	6.8%	7.0%	–

Sources: BW, CIBCR, BLS

MONETARY INDICATORS

	Latest week	Week ago	% Ch year
MONEY SUPPLY, M1 (7/26)	$1,086.7	$1,084.6r	
BANKS' BUSINESS LOANS (7/28)	270.3	272.2r	
FREE RESERVES (8/4)	983	745r	
NONFINANCIAL COMMERCIAL PAPER (7/28)	159.9	159.3	

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	
FEDERAL FUNDS (8/10)	2.96%	3.06%	3.
PRIME (8/11)	6.00	6.00	6.
COMMERCIAL PAPER 3-MONTH (8/10)	3.21	3.22	3.
CERTIFICATES OF DEPOSIT 3-MONTH (8/11)	3.15	3.16	3.
EURODOLLAR 3-MONTH (8/6)	3.18	3.19	3.

Sources: Federal Reserve Board, First Boston

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipm
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

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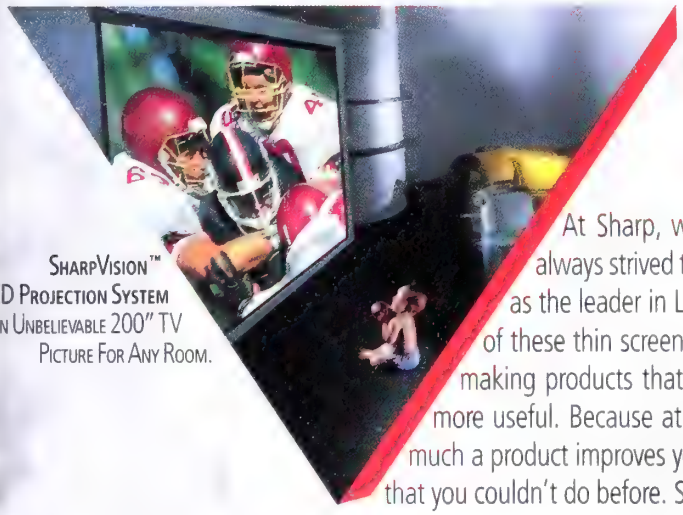

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93 Sharp Electronics Corporation. Screen Sizes Measured Diagonally. Screen Images Simulated. Models Shown Clockwise From Top Right: VL-HL 100U Camcorder, OZ-9600 Touch Screen Wizard, XV-H30U LCD Projection System, 4M-T30U LCD TV

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BLUE WATER, SILVER SALMON —AND RED INK

For much of the year, Alaska's Kodiak Island is cloaked in rain and clouds. ıt the four fishermen on the mée Nicole have enjoyed clear ies for nearly a week, and just ıw the sun is beating down th almost tropical intensity. st off the bow rise white cliffs d green mountains. The water s an inviting turquoise hue, t the temperature is in the F-50F range—cold enough to l someone.

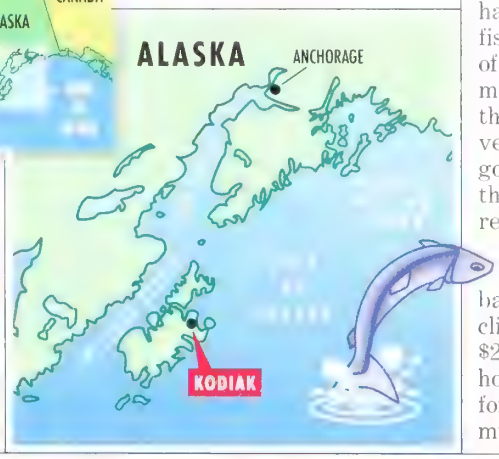
Up on the bridge is skipper m Stafford. His boat has been ɔrking this rugged stretch of ast for more than a week and s scooped up several thousand d salmon. That's more than st summer, but Stafford is ıking less money, because the ırket for reds has collapsed 80¢ a pound, about half of ıat Kodiak fishermen received t year. "We were hoping for a llar," Stafford says. "If we ıld see that, we could still ıke ends meet. But at 80¢, it ıt doesn't compute."

The price could go even low- as wild, ocean-caught Alas- ı salmon faces more and more npetition from the farmed fish of Can- a, Chile, Scotland, and elsewhere. To- v, Alaska is the world's largest salmon ɔducer, with more than 130 million ı caught each season. Farmed salmon e scooped up all year long. And the ; Japanese buyers increasingly are ning to farmed fish and the huge salmon runs of e newly opened-up Rus- n Far East.

PSIZED. "Farmed-fish pro- ction has soared," says ın Lotzgesell, treasurer Kodiak Salmon Packers . in the Aleut village of Larsen Bay, ɔut 15 miles from where Stafford is ıing. "The quality is increasing in Rus- ı reds. We no longer have the market ourselves." So prices will continue to ɔp. Already, some fishermen are in ıkruptcy or have lost their boats to · banks.

This is traumatic change for an in- stry that has deep roots in Alaska's tory. The salmon fishery began more than a century ago, and the push for Alaska statehood in the 1950s was in part a rejection of domination of the fishery by Seattle canneries that used river-mouth fish traps to take salmon on their way to spawn. The new Alaska state government banned such traps, which endangered future generations of salmon, and eventually Alaska had more than 10,000 salmon fishermen. The fishery now accounts for some 30,000 seasonal jobs and brought in $575 million in 1992.

SORTING THE HAUL: CATCHES—AND PRICES—ARE DOWN



Lotzgesell manages one of the state's most remote processing plants, built more than 80 years ago by a Seattle packer. Today, the Larsen Bay plant processes some 14 million pounds of fish a season and employs 150 people. Most workers come from the Lower 48: college students who want a taste of life in Alaska's "outback." Art Bislund, a plant supervisor, is now in his fifth season. A law student from Idaho, he has had only a couple of days off since he arrived at Larsen Bay in early June. At the start of the season, he weighed 245 pounds; he's lost 30 pounds while working as much as 120 hours a week. By summer's end, he expects to gross more than $10,000 to help finance his next year at school.

COLD BLAST. Bislund is in charge of a blast-freezing operation. The blast freezer is aboard a docked barge, and at −25F can freeze red salmon hard as brick in a few hours. Workers don bulky Arctic suits to haul boxes of fish in and out of the freezer in an operation that goes on day and night. Nearly all of the frozen salmon is shipped to Japan. The sorting and grading is monitored by checkers from Kyo-Kuyo Co., the Japanese importer that buys Kodiak Packers' fish. Lotzgesell trusts KyoKuyo to give him an honest assessment of the market and pay a fair price.

But Stafford and other fishermen question how the market really works. "When we have these valleys," he says, "it seems like the fishermen are the ones that suck it up—not the processors." If that continues, Stafford, 27, may have to rethink his plans to keep on fishing. He grew up on Kodiak, the son of a plumber and heating contractor who migrated to Alaska from Ohio. His father supplemented his income by harvesting halibut, and at age 16, Stafford got his first job as a deckhand, just as the fishing industry was beginning to recover from a botulism scare triggered by a can of contaminated fish.

By the late 1980s, the market was back, and the price of red salmon climbed to record highs of more than $2.40 a pound dockside. Crewmen took home paychecks of $70,000 to $80,000 for a summer's work. Skippers earned much more, and many were able to buy

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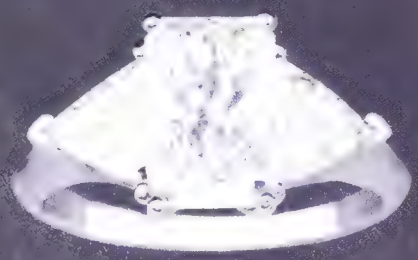
I'll always remember that face. The smile bordering on a tear. Silence as powerful as music. Eyes as lively as the diamond I nervously slipped on her finger. And now that we have come so far together, perhaps now is the moment to celebrate that love, once again, with a diamond as exceptional as our love.



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Letter From Alaska

costly new boats with souped-up engines and fancy high-tech gear or spend their winters in Hawaiian condos.

Since then, though, prices have slumped. Two years ago, demand was so poor that fishermen dumped more than 5 million pounds of Prince William Sound pink salmon that no processor would buy. In other parts of Alaska, low prices triggered strikes by fishermen. Strikers tied boats to their docks, and fishermen who went out risked having their nets and boats sabotaged.

This year, with prices at all-time lows, a few groups of fishermen again talked strike, but the movement fizzled. "I would say strike," says Stafford, who supported the 1991 strike. "But what I have seen in the past . . . is that strikes just cause a bunch of animosity. There is conflict created there that goes on for years."

Stafford isn't expecting a market turnaround anytime soon. He works winters as a carpenter to get by, and he's cutting his debts and trimming expenses. The Aimée Nicole, for example, was salvaged from a bay bottom. Stafford and his father-in-law (and partner) spent the winter refurbishing it.

Stafford also has tried to improve his lot by changing fishing grounds. He sold his permit to fish Prince William Sound for $100,000 and bought a $100,000 permit that lets him fish off Kodiak. He now has a longer season to pursue red, pink, silver, king, and chum salmon around the glacier-cut fjords and rocky coasts of the 100-mile long, largely roadless island.

RAZOR CLAMS. When the fishing slows off Kodiak, Stafford motors north across the Shelikof Strait to fish off the Alaska Peninsula. It is a place of glaciers, gravel beaches, and huge grizzly bears that he sometimes sees digging in the surf for razor clams.

Stafford is one of about 340 skippers with permits to fish the Kodiak district. On this Sunday, he shares the point with three other seiners. According to an unwritten code, each crew is allowed to cast its nets for 30 minutes at a time, then they must haul in and give the next boat a chance. "We try to work together," Stafford says. "This seining is kind of a gentlemanly fishery."

But now, as fish prices plunge, some politicians in Juneau are talking about buying back permits to reduce the size of the fleet to make salmon fishing more profitable here. Such talk gets a cold reception in coastal villages. "It punishes the fishermen for the situation in the world market," says Heather McCarty, whose family operates a salmon boat in Prince William Sound. "You're talking about taking away people's livelihoods, and I've got a problem with that."

The fishermen prefer to expand their markets, especially in the U. S. Stafford is encouraged by the Kodiak McDonald's experiment with a Salmon McNugget and similar efforts to develop salmon filet markets on the East Coast.

Meanwhile, the Aimée Nicole has spent much of this Sunday with nets stacked on deck. The crew has been idling, watching a big brown bear and her cub as they roam a nearby hillside. Late in the afternoon, it's time to fish. The salmon are right off the point, searching for signs of a freshwater river.

NET LOSSES: TOM STAFFORD IS PLYING NEW WATERS

Stafford maneuvers the bow of his boat up to a cliff face, as a crewman in a skiff drags the net out from the Aimée Nicole's stern to hang like a curtain in the current. The skiff gradually shapes the net into a hook, then pulls it into a circle. As the crew beats the water with metal plungers to scare the salmon toward the center of the net, the end is cinched tight and hauled on deck.

The net contains a meager catch of fewer than 20 salmon vs. more than 200 salmon caught in a set earlier that week. "This is what you call scratch fishing," Stafford says.

Two other boats try the point and also come up with little. Then, as the summer sun softens into the long northern twilight, Stafford steers a course across the strait, seeking a new spot to drop his net.

HAL BERNTON

Anchorage-based Bernton often writes about the salmon fishery.

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Readers Report

OSHA REFORM: PUT SAFETY FIRST, NOT POWER

Your article on OSHA ("Stepping into the middle of OSHA's muddle," The Workplace, Aug. 2) contained a popular misconception: Under President Bush, the Occupational Safety & Health Administration had a hands-off approach. In fact, under Bush, OSHA was more aggressive than it had been under any other President in the history of OSHA's existence. Under Bush, for example, proposed OSHA penalties increased from approximately $57 million in fiscal 1989 to over $116 million in fiscal 1992.

Business employers' perception of OSHA is at or near an all-time low. With the proposed OSHA Reform Act, Washington is moving in the wrong direction.

The OSHA Reform Act would grant OSHA even greater enforcement powers and greatly increase criminal penalties. Instead of blindly moving to enact this punitive legislation, Congress should listen to businesses that are regulated by OSHA. Congress would find out that the overwhelming perception is that OSHA is doing a bad job: Regulations are confusing and hard to understand, and OSHA is wasting its resources in enforcing too many regulations with too little relationship to safety.

While OSHA should be restructured, it should be done in such a way as to provide far more incentives and consultation, and fewer penalties.

Michael S. Holman
Columbus, Ohio

TAKING ROBERTS TO TASK ON FREE TRADE AND TAXES

I was disappointed in Paul Craig Roberts' views on the trade policies of the Clinton Administration ("Why Clinton can't have free trade and higher taxes," Economic Viewpoint, Aug. 2).

He says, "Clinton is undermining a free-trade agreement by negotiating a privileged access to Japan's markets." Roberts suggests that managed trade and free trade are mutually exclusive positions, which is untrue. Clinton is simply pressuring Japan to open closed markets, which will serve to eliminate protectionist barriers and promote free, not privileged, trade.

I agree that the best-case scenario for the consumer would be no new taxes and lower trade barriers. I also agree that, in the short term, higher taxes domestically will not benefit our foreign trade partners, either.

However, opening markets in Japan and other foreign countries will stimulate U. S. business—and the economy—in the long run and will outweigh any short-term negative impact of tax increases.

Erik A. Scott
Washington

Paul Craig Roberts claims that Clinton's tax will hinder the economic recovery of Europe and Japan. His thesis is that with less disposable income in consumers' pockets [because of higher taxes], imports will fall, as will the demand for domestically produced goods.

The fact is that consumer demand is fueled by the middle class, which is by far the great mass of purchasers. This class is barely touched by the proposed new tax bills. The higher-income taxpayers will bear the burden of higher taxes. This group's great tax windfall since 1986 did not stimulate spending but spurred increases only in personal wealth.

Leonard H. Carter
Lantana, Fla.

IT'S TIME TO RECOGNIZE TECHNOLOGY MANAGERS

Thanks for a brief but insightful look at the changes in engineering education ("Coming off the drawing board: Better engineers?," Science & Technology, Aug. 2).

Another innovative, significantly undervalued (in our opinion) degree worthy of mention is the engineering management (EM) masters program at Stanford. The Stanford EM program offers a general management curriculum with a focus on the management of technology-intensive industries, products, processes, and people. EM students have technical degrees and at least two to four years of work experience. EM courses span the breadth of management dis-

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RRECTIONS & CLARIFICATIONS

pain, no gain on the deficit" (Edi-
als, Aug. 16) should have identi-
one of the participants in the bud-
debate as Representative Kika de
arza (D-Tex.)

es, including managerial account-
finance, organizational behavior,
eting, inventory and production
ol, and risk analysis, to name a
The time has come to move technol-
nanagers from the back of the cor-
e bus into the board room.

Jack D. Peters Jr.
Outgoing President
Stanford Technology
Management Society
Stanford University
Stanford, Calif.

ECURITIES INDUSTRY'S LESS DISREGARD FOR RISK

ur article on the responsibility for
he savings and loan debacle ("The
collapse: Did anyone learn any-
?," Books, Aug. 2) should have had
nore item.
ave seen no criticism of the role of
ecurities industry in resisting all
s by the government to limit the
nt of their customers' money that
could shovel into institutions paying
ighest yield. Had the securities in-
y used the same care in investing
they would have had there been
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l, since they are well aware that
r returns entail more risk.

Joseph Grodsky
Los Angeles

Y: STILL PEDDLING PCS, ALLY

he article "Compaq flexes its pecs"
p of the News, Aug. 2), you re-
that Tandy has sold its personal
uter business. While TE Electronics,
anufacturing division of Tandy, has
he computer manufacturing busi-
to AST Research, Tandy remains a
r competitor in the PC retailing
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THE LAST EMPIRE: DE BEERS, DIAMONDS AND THE WORLD
By Stefan Kanfer
Farrar, Straus & Giroux • 409pp • $25

IS THE KING OF DIAMONDS FOREVER?

The sparkling two-carat number on your finger or cuff link may have come out of the earth in Zaire, Yakutia, or Australia. The odds are overwhelming, though, that it arrived via the selling organization of De Beers Consolidated Mines Ltd. De Beers bankrolled that subtle "diamonds are forever" advertising pitch and pretty much determined what your diamond cost.

Until recently, it was no overstatement to call De Beers the world's most successful monopoly—a massive operation whose reach extends to every corner of the globe. It's virtually impossible to do business in South Africa without running into De Beers and its sister monolith, Johannesburg-based Anglo American Corp. As early as 1960, the two made up "an octopus," complained former Prime Minister Henrik Verwoerd, with "branches in all spheres."

Someday, perhaps, someone will reveal how these two labyrinthine giants, with their cross-shareholding webs and interlocking directorships, operate. For now, that knowledge remains the birthright of a handful of people named Oppenheimer. Unless one of them decides to tell the tale—a remote possibility at best—the rest of us will have to settle for less satisfying glimpses provided by such works as *The Last Empire*.

Stefan Kanfer, a longtime contributor to *Time*, has chosen a propitiously dramatic moment to produce his study of De Beers, Anglo American, and the Oppenheimer family, which runs both. The diamond market, of which De Beers controls an astounding 80%, has been weakened by lingering economic malaise in key consumer nations. More important, the cartel's hold is being undermined by wildcat production in Angola and the former Soviet Union, and by illicit trade in other spots; even the two-lane desert road in Namibia on which I lived much of last year was a key route for diamond smugglers. At the same time, political revolution in South Africa is undermining the structures that have allowed the Oppenheimers' empire to hold sway.

Kanfer contends that Harry Oppenheimer, De Beers' 84-year-old patriarch, will overcome these challenges as he has past hurdles, just as his father, Ernest, did, and earlier, such titans as Cecil Rhodes. Writes Kanfer: "A chill wind is blowing, and many will wither before its blast. Not De Beers; not Harry."

That's arguable. De Beers and Anglo are both at monumental, fairly ominous junctures. Not only are profits down but De Beers, to prop up prices, is stockpiling an unprecedented $3.8 billion worth of jewels. To assert that an empire will stand because it always has is to ignore the lessons of ancient Rome and modern Britain—not to mention IBM. And to suggest that the profit motive always will overcome global revolution is either cheap cynicism or capitalist arrogance—it's hard to know which to accuse Kanfer of here. Either way, it's myopic claptrap: Things change, institutions die. Even the odd diamond shatters.

Still, *The Last Empire* is an entertaining read and a solidly researched, if somewhat derivative, history. It tackles a singularly complex entity whose operations are at once pervasive and secretive. That ambition makes the book interesting, but it also guarantees a central flaw: As the subtitle, "De Beers, Diamonds and the World," suggests, the book is just too broad.

Kanfer contends that De Beers will stay on top despite South Africa's upheaval. That's arguable

There is, first, the history of S African diamonds. Kanfer begins hi count in 1867, with a farm boy's di ery near the banks of the Orange R of the colony's first major diamond. ensuing 140 pages chronicle the ri the wealthy merchant class whipped a hundred disparate mines powerful buying and marketing orga tions; it also traces the inevitable b between the British and the Afrika for custody of the region's wealth.

A colorful time, to be sure. But fer's prolonged throat-clearing se mainly to overshadow the De Beers ry, which is too bad, for the sag compelling. Few organizations trans boundaries and politics as De B does. For decades, it bought Sibe diamonds through a string of he camouflaged intermediaries—even, fer observes, as self-righteous Sovie ficials "spent their days and nights ligning capitalism." Similarly, Tanz Ghana, and Sierra Le averred enemies of apartheid state, sold els to anonymous g tweens, such as the mond Development C and somehow that found its way to Beers.

Indeed, the subor tion of political idea wealth is central t Beers' history. Ka captures this nicely, cially in his docume tion of the publicly li Oppenheimers' pious tification of their in try's racist labor ab From the start of m in South Africa, em ers gave black workers the most da ous work, degrading accommodat and wages that were only a fracti those paid whites. Ernest Oppenhei late-life epiphany about such inequiti 1956 did little to improve the lot c workers.

But Kanfer misses the final irony though De Beers and Anglo Ame have been relatively progressive ployers by South African standar was the mining companies' discrimi ry work and pay rules that force emergence of a vital black union m ment in the early 1980s. That unio provided the core of a grass-roots d cratic surge that has moved South ca to the brink of majority rule sent tremors of uncertainty throug vast networks of the Last Empire.

BY KEITH H. HAMMO

Hammonds has worked and travel southern Africa off and on since 19

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WHY EUROPE DIDN'T TAKE THE LAST STEP TOWARD UNION

BY ROBERT KUTTNER

The Bundesbank has now made it clear that it places Germany's national economic goals above Europe's, and there is no supranational bank to take its place

It has become fashionable to conclude that the European Monetary System collapsed of its own weight and that we are better off letting markets set exchange rates. I doubt it.

The EMS, founded in 1979, attempted to protect Europe's economic union from destabilizing currency-exchange fluctuations. Currencies could fluctuate only within very narrow margins; the Continent's central bankers and governments pledged to intervene collectively to maintain those parities. When economic fundamentals—rates of interest, inflation, and growth—sharply diverged, nations were allowed to revise their target exchange rates provided they were orderly and infrequent. Thus, the EMS blended monetary order and monetary flexibility in a region, much as the Bretton Woods system of fixed rates (that collapsed in 1973) had done globally.

The sponsors of the EMS had several goals. Chaotic currency fluctuation has a high price. Businesses have to spend real money hedging exchange-rate risks. Trade is deterred. There is a wider risk of periodic competitive devaluation. In the 1930s, nations sought to export their unemployment by cheapening their currencies, with the collective result of global deflation and financial chaos.

MARCHING IN STEP. The very process of monetary coordination was intended to produce greater convergence of economic fundamentals. A system of fixed exchange rates can work only when member nations' deficits, interest rates, and growth rates are reasonably close to one another. The discipline of managing the EMS forced the Europeans to bring their economic policies into closer alignment.

Currency coordination was seen as a precursor to greater political unity. By cooperating to manage their fiscal and monetary policies, the Europeans were breaking down old national enmities and creating political and financial alignments conducive to an eventual single currency and a European central bank. It was tacitly understood that the EMS depended on French-German cooperation and on the Bundesbank's interim role as Europe's de facto central banker.

Although the proximate cause of its collapse was speculative pressure against the French franc, the EMS failed mainly for political reasons—a collective retreat from the exigencies of European union. London left the exchange rate mechanism last fall, unwilling to align its fiscal and monetary policies with those of the Continent. Bonn rated absorption of the eastern Germans ahead of its loyalty to the European Monetary System, even though this imposed high interest rates and slow growth on the entire Continent. To keep the franc strong, the French were determined to match the high German interest ra

In the end, no nation would subordinat short-run interest to the greater cause of ropean union. In principle, the reversio floating rates liberates the rest of Eu from the punishment of matching high Ger interest rates. Yet the risk of currency w which the EMS was designed to avoid, rem At this writing the old parities are defu but several smaller nations continue to fend their currencies with preposterously interest rates. Belgium, in a recession suffering 13.5% unemployment, pushe short-term rates to 25%. Others, perhaps France, may take the opposite course seek to boost exports with lower dom rates and a cheaper currency.

SPLINTER EFFECT. Competitive currency m ulation exacts real economic costs—just as architects of the EMS and the Bretton W system grasped. It is a form of economic tionalism ultimately incompatible with the ic of European union. The Bundesbank now made it clear that it places Germany' tional economic goals above those of Eu and there is no supranational bank to its place. By contrast, in 1979, when the was founded, the government of Ger Chancellor Helmut Schmidt, a committed E pean, overcame Bundesbank opposition to whole idea. But during the week of July the Bundesbank had the full support of C cellor Helmut Kohl and Finance Minister Waigel when it effectively killed the EM refusing to cut German interest rates.

Thus, the entire European union proje now in a dangerous stall. Ancient hostil have been revived. There is talk of nat fortress economies, and a catch-22 blocks ther progress: Until there is a central Eu an bank, there will be unstable currency kets. But the very instability in toc currency markets and the collapse of the undermine the interim steps necessary to ate such a central bank.

The faint silver lining is that eventual er interest rates and cheaper currencies stimulate higher growth in the weaker ec mies, and then Germany will finally lowe own rates. If such a convergence does occ rebasing of fixed parities and a restorati a stable exchange rate mechanism at leas comes technically possible.

But the system still needs to be man by statesmen with a pan-European vision. EC has come a long way since its 1957 fo ing. But the home stretch will require largest strides, and none among the EC's rent leaders seems able to fill the sho its founders.

ROBERT KUTTNER IS CO-EDITOR OF *THE AMERICAN PROSPECT* AND AUTHOR OF *THE END OF LAISSEZ-FAIRE*

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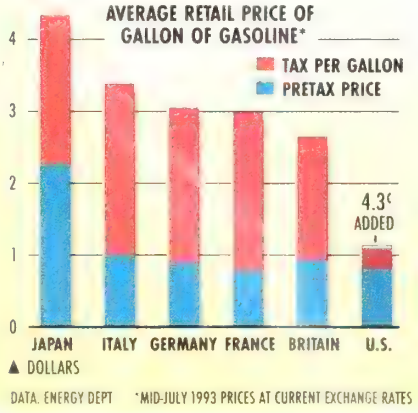
BY GENE KORETZ

WHY THERE WON'T BE TOO MUCH PAIN AT THE PUMPS

Although the coming 4.3¢ federal gasoline tax hike has raised hackles among the driving public, it still appears mighty small to America's industrial trading partners. Not only are gasoline taxes and prices far higher in Europe and Japan (chart), but they are being raised aggressively as governments tackle growing budget deficits. Britain, whose taxes account for 70% of the retail gasoline price, hiked them by 10% last March, for example, while Germany raised them by 36% in 1991.

Thus, from a competitive standpoint, U. S. gasoline and fuel taxes still favor U. S. industry by a healthy margin. Moreover, experts note that the tax hike will have beneficial effects on pollution and energy dependency. Alan J. Krupnick, Margaret Walls, and H. Carter Hood of Resources for the Future, a Washington environmental research group, estimate that it will reduce the annual distance the average car is driven by 243 miles—cutting gasoline usage by 1.9% and oil imports by 2% or so.

U.S. GASOLINE TAXES STILL LOOK PUNY OVERSEAS



DATA: ENERGY DEPT *MID-JULY 1993 PRICES AT CURRENT EXCHANGE RATES

Using New York City as an example, the RFF researchers estimate that by reducing motor vehicle usage, the tax hike will achieve close to 4.2% of the emission reductions mandated by the Clean Air Act of 1990. And measured by foregone tax revenues due to reduced gasoline purchases, they say, "the cost-effectiveness of the tax is close to that of other air-quality improvement approaches such as enhanced vehicle inspection and maintenance programs."

Consumers, however, remain understandably troubed. Partly because of far lower gasoline prices, Americans drive two to three times more miles a year than the Japanese and Europeans, so a small tax hike costs them far more. Still, the RFF researchers estimate that the average increase in taxes will be small, running about $44 per household, or 0.13% of average household income, with poorer households and residents of some states anteing up as much as 0.19%.

But the irony of the tax increase is that it is far overshadowed by the decline in gasoline prices during the past decade. Since 1981, the average price of unleaded gasoline at the pump, including all taxes, has fallen from about $1.38 per gallon to $1.08. In inflation-adjusted terms, the price of gasoline is now actually lower than it was before the huge price runup of the mid-1970s.

THE TAX HIKES SHOULDN'T DERAIL THE EXPANSION

If history is any guide, tax hikes can be lethal to expansions. The last time both corporate and personal tax rates were raised, for example, was in 1968, and a recession followed. And the more recent tax increases of 1990 torpedoed an already foundering economy.

Economist Edward S. Hyman of investment consultants International Strategy & Investment Group Inc., argues that history won't repeat itself this time around, however. In the 1968-69 episode, he notes, the inflation rate was 5% and rising, bond yields were moving higher, and the federal funds rate hit 9%. And in late 1990, the economy was already weakening, fed funds and bond yields were both over 8%, the banking system was in trouble, and consumer prices were rising at a 6% clip.

By contrast, notes Hyman, business today is expanding, fed funds are at 3%, bond yields are at 25-year lows, banks are healthier, and inflation is around 3%. In sum, he says, "today's tax increases are occurring in a far more benign environment, and that means that they are much more likely to slow the economy than to push it into recession."

THE STUNTED GROWTH IN THE LABOR FORCE CAN'T LAST

The good news for Americans is that the jobless rate in July fell to 6.8%—its lowest level since 1991—at a time when unemployment is soaring overseas. The less positive news is that muc this decline seems the result of unusu ly slow growth in the labor force.

Over the past 12 months, the la force, which usually accelerates in early years of an expansion, has act ly increased by only 0.6%. This tiny vance contrasts sharply with 1991 La Dept. projections based on current d ographic trends that indicated the la force was likely to grow at an aver annual rate of about 1.3% through 2

A sluggish job market and depres wages seem to be the main factors hind the slowdown. Most notable, Labor Dept. economists, are a dro labor-force participation among teen ers, who are having trouble obtain entry-level jobs, and the decisions many young women to forgo work f while and have children instead.

Whatever the cause, demograp trends indicate that it won't last. O the economy picks up, more people start looking for work, causing the j less rate to spurt higher. How m higher? If the labor force had gro 1.3% over the past year, the unempl ment rate would currently be 7.5%.

MORE SUNLIGHT ON EUROPEAN BOARDS OF DIRECTORS

It has been a long time coming, many of the same pressures t forced boards of U. S. corporations assume more independent, activist r are now being felt by their Europ counterparts. According to a new C ference Board report, a combination scandals at major companies, risi shareholder pressures, and the grow multinational scope of corporate ope tions is "challenging European direct to improve their stewardship of the c panies they oversee."

The most significant development been in Britain, where a special pa drawn from the financial and busin communities recently issued the so-cal Cadbury report (named for the pan chairman, Sir Adrian Cadbury), wh recommends a code of practice boards of directors. The code seeks strengthen independent monitoring corporate affairs and ensure reliable porting of financial information.

While other European nations ha tighter laws regarding board structu and duties, the Conference Board ports that they, too, are holding dir tors' feet closer to the fire. The big pu on the Continent is to improve the sel tion of independent, capable outside rectors and to increase accountability

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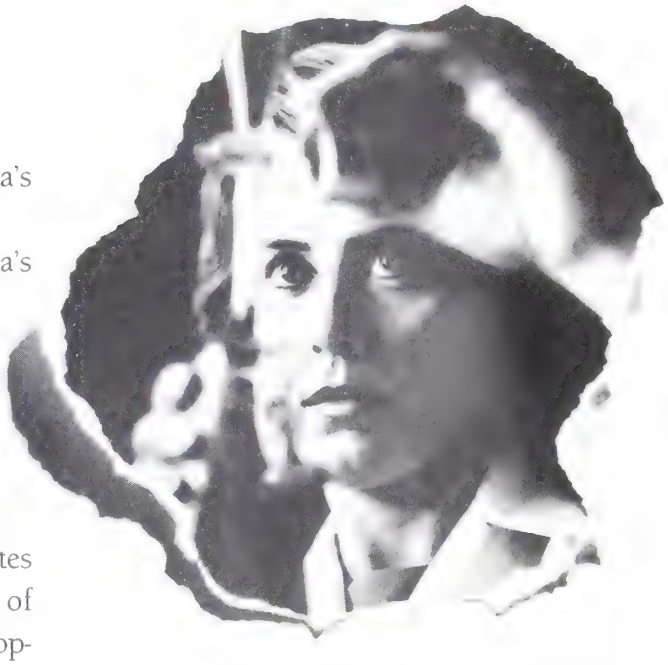

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UST 23, 1993

BY JAMES C. COOPER AND KATHLEEN MADIGAN

HE JOB NUMBERS ARE PUTTING OME KICK IN THE ECONOMY

he solid report on the labor markets in July says that economic growth in the second half is shaping up to be a lot livelier than it was in the first half. It raises a key question: Did the economy really grow at nnual rate of only 1.2% in the first half?

he comparatively strong performance of the labor kets so far this year suggests otherwise. Despite the lling pace of output, employers have added 1.2 million kers to their payrolls through July (chart). Total work has climbed at an annual rate of 3.3%, and the unemment rate, down to 6.8% in July, has fallen to the lowlevel in nearly two years. All this seems inconsistent such a poor showing from real gross domestic prod- Supercautious companies would hardly add so many kers if conditions were really that bad.

A good reason to believe the job data instead of the GDP numbers is the recent surge in new business formations. In the second quarter, the Commerce Dept.'s index of new incorporations minus failures jumped 3.4% above its fourth-quarter level, yielding the most net new businesses in three years. Following a steep drop during the 1990-91 recession, startups floundered for ar, but in just the past two quarters, more than half ose losses have been recouped. That explains why job tion has been so healthy, despite all the headlined corporate layoffs.

he divergence between the paces of real GDP and 's worked suggests that productivity growth in the half was dismal, and indeed that's just the way the or Dept. reported it on Aug 10. However, the Comce Dept.'s annual rewrite of history—its benchmark revisions—are due on Aug. 31. Don't be surprised if GDP and productivity end up looking a bit better.

UILDERS RE ETTING USIER

But that's all history. Looking toward the second half, the July pace of employment growth is consistent with another 1 million new jobs, in addition to the million created in the first half. U. S. industry added 162,000 kers last month, and job gains in both May and June e revised up slightly.

he growth in July payrolls was also fairly broad. e 56% of the 356 industries surveyed by the Labor t. expanded their work rolls. Among goods producers, a gain of 24,000 construction jobs more than offset a small 13,000 decline in manufacturing employment.

More construction jobs are on the way this summer, as housing continues to perk up in response to low interest rates and better job growth. Mortgage applications to buy a home rose sharply throughout July and ended the month at a record level, according to the latest reading from the Mortgage Bankers Association of America.

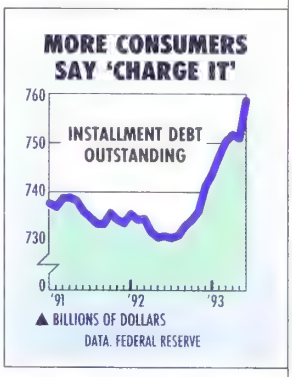
As in recent months, service-producing industries, which took on 153,000 more workers, accounted for nearly all of July's job gains. Retail trade, especially restaurants, along with temporary-help agencies and health services, continued to be big gainers.

SHOPPERS MAY START TO WORRY LESS

With job growth refusing to knuckle under, despite continued layoff announcements, job worries among consumers may well start to taper off, giving some buoyancy to the various measures of consumer attitudes. Already, some July readings have perked up a bit.

Moreover, now that President Clinton's budget plan is finalized, some of the uncertainty hanging over households and businesses will be lifted. All this bodes well for second-half consumer spending.

Also, households apparently are feeling more secure about financing those purchases with credit (chart). The volume of consumer installment debt soared by $7.7 billion in June. Excluding the month when the Federal Reserve Board broadened its coverage of the data, that was the largest monthly increase in six years.



The July job gains suggest that income growth will support that added volume of debt and a continued solid pace of spending. Average weekly earnings rose 0.5% last month, to $373.29. Add to that the month's job growth, and it's a good bet that July personal income scored a hearty gain.

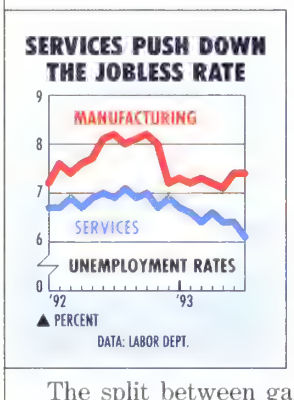
Installment debt as a percentage of aftertax income stood at 16.4% in June, up only slightly from May, but far below the peak of nearly 19% hit four years ago. Moreover, the cost of servicing that debt has fallen dramatically, especially in light of this year's steep decline in long-term interest rates (page 20).

To be sure, average monthly job growth of nearly 170,000 through July is well below the typical pace for this

stage of an expansion, and many of the new positions offer skimpy pay, benefits, and security. However, in terms of the outlook, more jobs are always better than fewer. The evidence: Another anomaly in the poor first-half GDP showing was that consumer spending rose at an annual rate of 2.3%—twice the pace of GDP.

GOODS MAKERS: READY TO COMPETE

Clearly, the biggest drag on employment growth remains manufacturing. July's job loss dropped factory payrolls to the lowest level since 1965. Defense cuts at home and recessions in Europe and Japan are the biggest drags, but another is corporate restructuring, which is much more intense among manufacturing companies than service businesses. As a result, the unemployment rate in manufacturing still hangs high, while joblessness in services continues to push lower (chart).



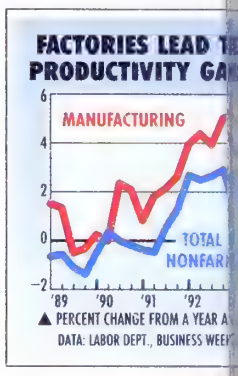
Despite all the layoffs, manufacturing output continues to muddle along in fits and starts. July might be one of the starts. The factory workweek jumped by 12 minutes last month, to 41.4 hours. The workweek had slipped in May and June but now is back near the 26-year high reached in April. That bodes well for July industrial production.

The split between gains in manufacturing and service employment explains the recent wide divergence in productivity growth in the two sectors. The Labor Dept. reported that output per hour in U. S. industry fell at an annual rate of 2.5% in the second quarter, following a 1.6% drop in the first quarter. Those were the first back-to-back declines in productivity since the recession.

However, the service sector more than accounted for all of the weakness, which could prove to be short-lived if economic growth picks up in the second half, as appa likely. In sharp contrast, output per hour in manufactu soared at a 5.2% annual rate last quarter, following a equally impressive 4.9% advance in the first quarter

Those gains are simply a continuation of the four- trend of accelerating productivity gains in manufactu Factory productivity is up 5.2% from a year ago, strongest annual performance in 5½ years (chart).

The key result: U. S. manufacturers are becoming some of the most competitive producers in the industrialized world. Because the pace of factory pay and benefits—up 3.8% from a year ago—remains well below the growth rate of productivity, unit labor costs in manufacturing have declined for six consecutive quarters. Once Japan and Europe get their economies turned around, the factory sector will be in a position to become an port powerhouse by 1994.



For the rest of 1993, if job growth equals the first- pace, better economic growth seems assured. Over y ly stretches, real GDP tends to grow faster than ove hours worked, with productivity gains accounting for difference. But just the opposite occurred in the f half. If hours worked in the second half match the growth pace of the first half, it's a good bet that real will grow in excess of 3%.

That would be good news for President Clinton, needs a sturdy economy to absorb his new round of hikes and spending cuts. Moreover, in addition to tack the federal deficit, Clinton is well on his way to deliver on another key campaign promise—to create 8 mil new jobs by the end of his first term. Judging by the J job report, he's likely to be a quarter of the way there the end of the year.

THE WEEK AHEAD

INDUSTRIAL PRODUCTION

Monday, Aug. 16, 9:15 a.m.

Output of the nation's factories, mines, and utilities most likely posted a 0.4% increase in July. That's the median forecast from a survey of economists taken by MMS International, a unit of McGraw-Hill Inc. Record output levels at utilities, the result of the heat wave on the East Coast, accounted for much of the increase. Manufacturing production appears to have posted a gain, as well, signaled by the rise in overall factory work time in July. The rise in the workweek last month more than offset the small drop in factory employment. However, plenty of production capacity remained idle in July. The operating rate for all industry is expected to have risen to 81.3% in July from 81% in June.

HOUSING STARTS

Tuesday, Aug. 17, 8:30 a.m.

The MMS survey expects to see housing starts for July at an annual rate of 1.26 million, up only slightly from June's total of 1.25 million. Low mortgage rates and better job growth are helping housing, but July's heat wave and relentless rain and flooding in the Midwest undoubtedly cut into the month's starts.

MERCHANDISE TRADE DEFICIT

Thursday, Aug. 19, 8:30 a.m.

The merchandise trade deficit probably widened to $9 billion in June, the MMS survey projects, compared with $8.4 billion in May. The survey expects a sli rise in exports and a greater, but small, increase in imports. The exp gain is based partly on the June ris factory shipments, and a surge in U customs duties in June suggests an crease in imports.

FEDERAL BUDGET

Friday, Aug. 20, 2 p.m.

The MMS economists expect a July b get deficit of $41 billion. That would lower than last year's red ink, wh totaled $43.2 billion. This would m the budget gap for the first 10 mon of the 1993 fiscal year is running nea $30 billion below the similar 1992 to The deficit for the full year could co in well below last year's $290 billion.

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AUGUST 23, 1993

HOW LOW CAN RATES GO?

PROBABLY LOW ENOUGH TO OFFSET THE TAX HIKES

It shouldn't have come as a surprise—though it did to many. No sooner had the vote been cast in Washington in favor of a historic budget-cutting agreement than the bond market opened with a rally, pushing the yield on the 30-year Treasury bond to a 16-year low of 6.44% by Aug. 10.

The market will give up some of its gains, but the trend is clear: Interest rates will ratchet downward for some months to come. In the 1980s, easy fiscal policy was offset by tight monetary policy. In the 1990s, the relationship may be reversed—fiscal drag could well be offset by lower rates.

The Clinton Administration bet that rates would fall when it pushed for the deficit reduction package, and it continues to hope for still lower rates as it tries to convince the public of the rightness of the new fiscal discipline. "I don't think there's any question that the fall in [long-term] rates in the last few days is due to passage of the deficit reduction package," says Robert E. Rubin, director of the White House National Economic Council.

If Clinton lucks out, lower rates will keep the economy growing at a 2½% pace—and the budget deficit will go down

The Clintonites seem likely to get their wish. Lower rates will prevail, not because the Federal Reserve Board ordains them or because the financial markets like them. Indeed, members of the Fed have recently sounded warnings about inflation, and the financial markets remain sensitized to the smallest hint of rising prices. If anything, the Fed and the markets have been slightly biased toward higher rates, not lower ones.

INFLATION MIRAGE. But the budget agreement ensures that what was sluggish growth is likely to remain so, even with the help of lower rates. Thus the mirage that held sway over the financial markets—the prospect of healthy economic recovery that might ignite inflation—has now truly vaporized. Throw in the harsh reality of recession or near-recession in all the major industrial nations, and the stage is set for still further declines in interest rates. "These lower rates have a lot of staying power," says economist David Resler of Nomura Securities International Inc. "There's no economic activity out there that would cause them to reverse course, and there should be continued downward pressure." Indeed, if the inflation rate keeps decelerating as it recently has (chart), there's room for the long bond to fall below 6% and even dip to 5½% in coming months.

Lower rates may not be able to lift the U. S. economy above a growth path of 2½% to 3%, but they will certainly be the tonic that prevents rising taxes and defense and Medicare spending cuts from pushing growth below that range. Expectations are that the budget agreement could shave a half-percentage point off gross domestic product growth next year. Cheaper money—especially the delayed impact of the rate decline that began in February—should work to offset a good part of that fiscal drag. On balance, though, it will be a considerable achievement to obtain growth of 2½% just as serious deficit reduction begins.

There may be other benefits that kick in only later, enhancing growth after this year. One is that companies have been able to refinance their debt at lower rates, and that has put them in a better position to ramp up spending and production if demand picks up steam. Then, too, lower rates have restored a measure of financial health to the banking system, which was flirting with a 1930s-style collapse only a few years ago. So when growth revives, banks will be in a better position to meet r loan demand. Finally, higher mar tax rates and falling yields may r state and local securities more at tive, providing the public sector new opportunities to finance infras ture spending. Such spending could oomph to the economy, perhaps year and into 1995.

The boost only goes so far, the Despite the hoopla that would hav celebrating the lowest rates in y rates in real or inflation-adjusted t are not so low as they seem. After tracting inflation of about 2½%, r

and long-term interest rates still from 3¼% to 4% in real terms. may explain why the economy's re- e to falling rates so far this year, positive, hasn't been dramatic.

ER BURDENS. This suggests that ng, auto sales, and investment, typically thrive with declining will do so once more—but not acularly, unless real rates start to s well. These three interest-sensi- ectors, which generally propel eco- recovery, indeed have been doing in recent months. But the gains been steady and gradual and are likely to remain so. No fireworks here.

Mortgage refinancings, for instance, now account for a hefty 55% of all mortgage application volume after a second spurt this year (chart). If rates keep falling, another round of refinancing is bound to occur. Household debt burdens will get lighter, and cash flow will be freed up. Ideally, then, there will be more spending on home improvement, appliances, furniture, and other goods. "People will feel more comfortable spending on their homes," says Roger Kubarych, economist at Henry Kaufman & Co. And an improving housing resale market will mean that "they feel they're investing in an appreciating rather than a depreciating asset."

Likewise, the homebuilding market is getting a boost, but so far only a small one. Housing starts are up an annualized 3%, to 1.25 million units, so far this year. But that remains well short of the 1.5 million annual units of the 1980s and 1.8 million units of the 1970s. Part of that has to do with demographics—household formation has slowed down. But economists also believe that it will take a bigger break in rates to really rev up the housing construction market.

GRADUALIST GAME. Auto sales, too, are improving, thanks in part to lower rates. Car and light truck sales are running at a 13.6 million annual rate so far this year, up 6% from last year. But that's below 1990's 13.9 million pace and 1989's 14.6 million units sold. Business investment has been concentrated in equipment, and here, lower rates have clearly made spending more attractive—pushing expenditures up at a 14.7% rate in real terms over the past year. But unless U. S. manufacturers enjoy the follow-through of rising and healthy demand for their products, capital spending gains will slow.

Much of what happens next depends on the rest of the world. Following the near breakup of the European Monetary System, rates should begin to fall across the Continent as government officials, freed from following Germany's tough money policy, pursue domestic economic objectives and try to revive growth. European currencies may weaken against the dollar as a result, a development that would give Europe a trade advantage. But the effect of cheaper money in boosting demand for goods could overwhelm that advantage and allow the U. S. to export more to Europe. And sliding European rates could, in turn, permit U. S. rates to fall further.

How much good will lower rates do the economy in the end? There's no doubt the effect will be positive. But after 12 years of steadily falling rates, it's not clear that a few more turns of the screw will make a huge difference for growth. And if lower rates only ensure growth of 2½% for the foreseeable future, it could take a long time to bring the unemployment rate down markedly from its current 6.8%. These days, gradualism is the name of the game. It yields a steady but halting improvement in the economy—hardly the one Americans are accustomed to, but far from the worst possible outcome.

By Karen Pennar in New York, with Christopher Farrell, and Owen Ullman in Washington

PHOTOGRAPH BY SHAWN HENRY/SABA, CHARTS BY ROB DOYLE/BW

POLITICS

GRASS-ROOTS GRUMBLING: PENNSYLVANIA DEMOCRAT McHALE TRIES TO EXPLAIN HIS VOTE

FEAR AND LOATHING ON THE HUSTINGS

Voters are after the scalps of lawmakers who switched on the budget

"You're a spineless coward, and you are a disgrace to your country," ranted Eric from Allentown before he hung up on Representative Paul McHale. A freshman Democrat congressman from Pennsylvania's Lehigh Valley, McHale thought his Aug. 9 appearance on a popular call-in show on WAEB-AM radio would let him explain his vote for President Clinton's budget. But he also wound up getting an earful from irate constituents. "Thank you for successfully guaranteeing the end of small business in this district," snarled another caller, Jacob from Emmaus.

President Clinton knew that many supporters of his recently passed deficit-reduction package would be roundly criticized by constituents after voting to raise taxes by $241 billion over the next five years. But none is getting more heat than McHale and seven other House Democrats who voted against the President's plan on May 27, only to change sides to support the House-Senate compromise on Aug. 5.

After giving Clinton the narrowest of victories, the switchers face charges of hypocrisy, of caving in to pressure from the White House, and of engaging in unseemly horse-trading. The about-face "is a question of their integrity as officeholders," says Representative Bill Paxon (R-N. Y.), chairman of the National Republican Congressional Committee.

NO APOLOGIES. So while many in Congress head for the sun, most of the Endangered Eight are hustling to explain themselves. It hasn't been easy going. Right after the showdown vote, McHale, a 43-year-old Marine veteran of the Persian Gulf war who unseated longtime GOP Representative Don Ritter last year, learned that Paxon's NRCC had called every major media outlet in his district to attack the vote. Then the GOP announced plans to denounce the vote switch on billboards around the district. But the deepest wound came when McHale, marching with his family in an Aug. 7 centennial parade in Wind Gap, Pa., encountered scattered obscenities from some disgruntled constituents.

What's really disconcerting to McHale and others is the breadth of confusion over what exactly is in the legislation they passed (table). Above all, inc uals and business owners are convi they face massive tax increases. Bu Clinton Administration claims the hikes will affect only 1.2% of filers 4% of small businesses. As for the v spread disgust at the law's retroacti Democrats note that only high-inc taxpayers are affected.

McHale knows he has lots of exp ing to do, but he blames Repub half-truths rather than his party's ta "It is critical that a truthful presenta of the bill be made immediately— preferably sooner," he says.

McHale insists that his flip-flop motivated by deeply held principles. district is home to energy-intensive panies such as Bethlehem Steel and Mack Trucks Inc., and he opp the original House bill because its tax would hit such companies, he s But once the energy levy was stri down to a less onerous gas tax, Mc endorsed the legislation.

TOUGH SELL. The congressman has praise from Bethlehem Steel Chief E utive Curtis H. Barnette for publici the dangers of the BTU tax. Barr calls McHale "a very effective cong man" and says the tax bill is "a important step" in reviving the econ

And McHale is winning over s small-business owners and senior zens who learn that their tax hik negligible. "Like everyone else, I like to pay taxes," says Mayor Jame Mullen of Pennsburg, who will pay es on more of his Social Security b fits. "Deep down inside, while I'm anxious to pay more, I think it's the thing to do."

For now, McHale is plugging a one voter at a time. He and the other House Democrats who backed plan are optimistic they can placate ers by next Election Day. After hea his congressman's windy descriptio the bill's details, Dennis Krause, o of the Shady Nook Restaurant in Pe burg, says: "I guess it's not going real bad. I don't mind paying the tax I'm making money." A backhanded dorsement at best—and an indicatio how big a selling job Clinton and porters such as McHale have ahea them to convince voters the pain of cit-cutting will ever equal the gain.

By Richard S. Dunham in Pennsburg,

HOW McHALE IS PITCHING CLINTON'S PLAN

COMMON COMPLAINTS	SALES PITCH
Higher taxes will hurt small business	The plan will only affect about 4% of small businesses
The plan's $241 billion tax hike socks the middle class	Wealthy taxpayers bear the burden of the new income taxes, and 98.8% of Americans will see no increase
Most Americans will be forced to pay retroactive taxes	Retroactive taxes are unfair, but only the wealthiest 1.2% o households will pay them

NNIE GETS HER NTITRUST GUN

rosoft could be the first target for Justice's Anne Bingaman

resident Clinton's new antitrust czar, Anne K. Bingaman, got started in the trust-busting busi- by accident. She had barely hung ıer shingle in Santa Fe, N. M., in when another lawyer asked her to United Nuclear Corp., a uranium- ıg company, in a suit against Gulf ınd Royal Dutch/Shell Group. Five ; later, her dogged pursuit of the won United $1 billion. ersaries such as attor- Marshall G. Martin re- her as being a royal ı in the rear."

ıw, Bingaman may causing similar dis- ort to lots of compa- including software gi- Microsoft Corp. As head e Justice Dept.'s Anti- ; Div., she plans to an activist approach shop that got sleepy g its years of laissez- Republican leadership. dy, on Aug. 10, she lrew Reagan-era guide- that had made it easier manufacturers to fix ; with distributors. In- , she vowed to attack arrangements as po- ally anticompetitive. ɔnites want to chart new directions by in- ɔrating antitrust ac- into international com- ıveness policy and, ps, health-care reform. ɔptics wonder how much Bingaman, ill be able to achieve. With a back- ıd as a plaintiff's attorney in a job ıas typically gone to academics or se lawyers, "she's an unconven- choice," says George Mason Uni- y law professor William E. Kova- n antitrust expert. Not only that, ɜr resources are limited: Since 1980, ivision has shrunk by one-third, to wyers, as conservative courts have ily cut down the trustbusters'

EARLY SCALP." But Bingaman is ng out with a bang. On July 28, the e Dept. made the unusual request locuments in the Federal Trade ıission's case against Microsoft in ond, Wash.—the first sign of Bin- n's aggressiveness. The FTC had been probing alleged unfair business practices at Microsoft for three years but deadlocked a week earlier on whether to sue the company. A formal investigation hasn't yet been launched, but the bets are on that Bingaman will pursue the case. Says Kovacic: "It's one way to claim an early scalp."

Bingaman is likely to be just as hard-nosed in other areas. One important goal: She wants to pursue foreign companies that violate American antitrust laws. "Anyone who sells in U. S. markets should play by our rules," she says. Still, American companies shouldn't expect special favors from trustbusters, such as automatic O. K.s on mergers that enhance their global competitiveness. "We shoot ourselves in the foot if we have a more lenient enforcement policy" that favors global U. S. companies over rivals that compete only locally or regionally, says Bingaman.

The health-care industry is also unlikely to get any breaks. On Aug. 10, Bingaman said that the Justice Dept. and the FTC would draft guidelines for hospitals and doctors on cooperative ventures, but she won't give them any more leeway than they already have to combine or collude. And pharmaceutical companies that clamor for a special exemption to set price ceilings on drugs are likely to be disappointed. She also wants to spearhead inquiries into industries important to consumers, such as computers (table).

Bingaman showed political savvy in winning her job. She has practiced law in the capital since her husband, Jeff, took his Senate seat (D-N. M.) in 1983. The Bingamans don't know Bill and Hillary well, but Anne worked on Clinton's Justice transition team, using that as a base to lobby for the antitrust slot. She even sent faxes to supporters quashing false rumors that she had a "Zoë Baird" problem with illegal household help.

Bingaman's background may account for some of her drive. She is from Jerome, Ariz., a mining town where her parents owned small grocery stores. And like many women lawyers of her generation, she overcame discrimination to build a career. When she graduated from Stanford University law school in 1968, the only job offers she got were as a paralegal. Eventually, she took a teaching post at the University of New Mexico in Albuquerque and worked her way up. One accomplishment she's proud of: She successfully lobbied for a state equal-rights amendment in 1972.

In short, companies that rile Anne Bingaman will face a gritty, determined opponent. In fact, before Clinton's term ends, major companies that step out of line on antitrust issues may end up remembering her as some old adversaries do: a major pain in the you-know-what.

By Catherine Yang in Washington

ANNE BINGAMAN'S PRIORITIES

After years of laissez-faire GOP policy, Clinton's new antitrust czar plans to tighten up in these areas:

PRICE FIXING Will go after manufacturers that try to set high prices with retailers and squeeze out discounters

BUSINESS CONDUCT Starting with Microsoft, will scrutinize companies whose practices may harm competitors and consumers

PROTECTING CONSUMERS Will look hard at the price and quality of computers and other high-technology products

INTERNATIONAL POLICING Will step up review and enforcement of foreign companies' compliance with antitrust laws in the U.S.

DATA. BUSINESS WEEK

KATHERINE LAMBERT

EXECUTIVE SUITE

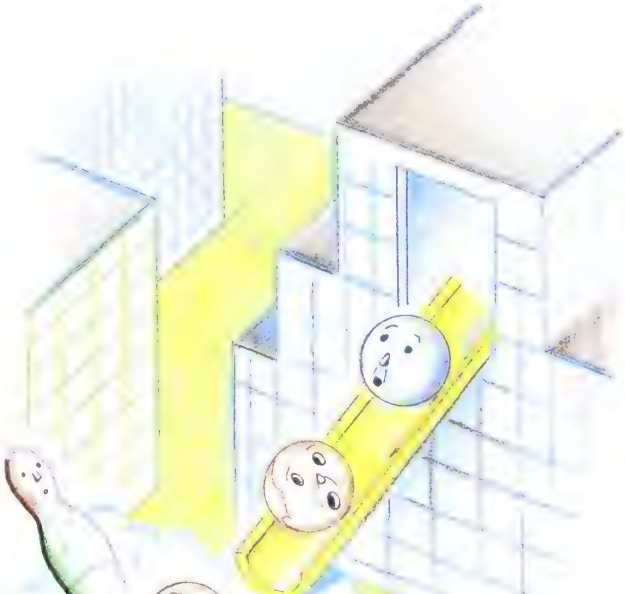
WHY MORE HEADS WILL ROLL

Outsider CEOs hire their own captains, who hire their own lieutenants...

Add Kay R. Whitmore, chairman and CEO of Eastman Kodak Co., to the growing casualty list of America's elite chieftains.

Impatient with Whitmore's lackluster efforts to cut costs and restructure, Kodak's directors announced on Aug. 6 that they were ousting him from the job he has held since 1990. "We didn't think that Kay Whitmore was the man to head the company for the next three to seven years," says John J. Phelan, former chairman of the New York Stock Exchange and a leader of the board coup.

The man who does, Kodak says, will be an outsider—the latest in this year's string of newcomers corralled in talent hunts to head troubled companies. IBM found Louis V. Gerstner Jr. in May; Westinghouse Electric Corp. lured Michael H. Jordan. And there's more in the works. "What we have seen in the past six months is just the beginning," believes E. Pendleton James, a prominent search consultant based in New York. "For every IBM or Kodak, there's a lot of midsize-to-smaller companies going through these changes that don't make headlines. If nothing else, it's become fashionable." In the past six months, outsider CEOs have joined Egghead, Quaker State, and on Aug. 11, General Instrument.



DAVID SUTER

MORE TURMOIL. In short, the age of the outsider is just beginning. Companies are looking for fresh perspective and radical change. Just ask the directors of Kodak. "This company is very much inbred," says Roberto C. Goizueta, a Kodak director and chairman of Coca-Cola Co. "That tends to accentuate the faults and also the virtues to the point where the virtues become faults. We need a third party to look at Eastman Kodak."

But a new perspective brings with it certain costs and risks, including ever more volatility and upheaval as the hired guns make their marks. Even at well-managed companies, organizational dislocation can more than offset the benefit of fresh ideas.

It starts with the multiplier effect. For every high-level outsider installed in an organization, say headhunters, there are often half a dozen or more follow-on recruits within the first year. Each of them in turn brings in managers in whom they have confidence.

That can mean more turmoil in already troubled companies—and in the companies that are raided for talent. Within months of taking over at IBM, Gerstner has brought aboard new senior executives from Chrysler, American Express, and Bank of America to plot the computer giant's strategies and operations in finance, marketing, and human resources and administration. Kodak directors say they expect several other top executives will be recruited to help a new outside chairman move more gressively at the company.

With each new outsider, boards sending another signal: They're no l er hesitant to consider newcomers f outside the company's industry. W headhunter James was recently reta to find a new CEO for an insurance pany, he asked the client to identify attributes it was seeking. "Leadersh came the reply over a boardroom ta "I'm not too concerned if the CEO kn much about the industry."

CHANGING GUARDS. Yet outsiders n fight significant handicaps. The grea single barrier to a successful transp is the institutional acumen an execu is likely to lack in a new environm An outsider doesn't know how th get done—or who can get them d Passed-over executives often resent new boss and are likely to be less mitted to his or success. The t essential to te work suffers.

"Boards today are looking for passionate leaders who can transfer that passion to others"

Toss in the m plier effect, and risks rise subs tially. "A new who comes in an cruits 'his te from outside wreck a turnar effort because new palace gu may simply rep the old pa guard," says Ro J. Brudno, mana director of Savoy Partners, a headhu in Washington, D. C. "The compa veterans will feel the new boss is e ing a wall between them."

Most outsiders believe Kodak use some shaking up. But can it a the pitfalls? Goizueta, who's heading search committee, says he's looking somebody with "tremendous drive energy, solid cost-control experienc successful business history. We w like to see a person with a strong keting background who can think st gically and very much internationa Adds Gerard R. Roche, chairman of drick & Struggles Inc., who is worl on the Kodak search: "Boards today looking for passionate leaders who transfer that passion to others."

All that adds up to some pretty da ing criteria. Throw in one more, jus daunting—the ability to bring on ra change without destroying what's about the organization—and a ques arises. Do IBM, Westinghouse, and dak need outsiders—or superheroes

By John A. Byrne in New York, Mark A. Maremont in Boston

ARE TRADE-SECRET POLICE PATROLLING YOUR COMPANY?

Roger Farah should have known that his decision to leave Federated Department Stores Inc. for a ɔ slot at rival R. H. Macy & Co. would ell trouble. As the merchandising-divi- n chairman, Farah is critical to a com- ny struggling to stay ahead of the npetition. Federated figured Farah's pertise was so vital that it slapped him th a lawsuit on Aug. 7. Its big worry: it crucial business plans and other pro- etary information would be useless if rah went to work for Macy.

The Farah brawl, to say nothing of neral Motors Corp.'s highly publicized usations of industrial espionage ainst its former purchasing czar, José acio López de Arriortua, point up a ssy but critical problem for corpora- ns. With ever more outsiders being ed on, how can companies keep em- yees—former and current—from ab- nding with the company jewels?

The first lesson these days is to be pared. Whether it's preventing the k and file from stealing product for- las or getting CEOs to sign contracts ring them from sharing marketing ns with rivals, more and more compa- s are following their lawyers' advice take stock of assets—and follow up h steps to protect them. "There was a e when companies were too proud to ke employees sign covenants not to npete," says Arthur Schwab, a lawyer ɔ specializes in trade-secret issues. it after they got burned, they realized vas good to have protections."

ANGIBLES. Some companies have n taking precautions for years. Gen- l Dynamics Corp., for one, routinely uires job seekers to sign contracts re- cting their use of its data and technol- as a condition of employment.

How well do such agreements work? y can be relatively easy to enforce en they cover specific technologies or cet formulas. Some 39 states have s defining a trade secret and when considered stolen. But the gets murkier when a dis- e erupts over a company's angible" property—say, a detailing where women's lines will be next season. s Stanley Lieberstein, an llectual-property expert: mpanies must make a dis- tion between the ordinary ls an employee can ac- e on the job and take him, vs. what consti- s the proprietary rights he employer."

It's a fine point that lies at the heart of the Farah suit. To protect its secrets, Federated wants to enforce a "no compete" provison in Farah's employment contract. If it succeeds, Farah will be barred from working for a competitor for two years after the contract expires—or until June 30, 1996. Federated claims it wants to keep Farah from revealing everything from how much private-label merchandise it produces to its expansion plans.

To keep Farah mum, the company asked an Ohio court to stop him from even negotiating with Macy until after his contract expired—a request the court temporarily granted. But on Aug. 11, Federated backed off, opting instead for a trial on whether Farah can go to Macy. For its part, Macy says it only wants Farah's expertise: "We're looking to Roger for his intelligence," says a source close to the company. "We have absolutely no interest in and no need for any confidential information." Farah has denied any wrongdoing; Federated won't comment.

FARAH: FEDERATED FIGURES HE'LL TAKE VITAL SECRETS TO RIVAL MACY

The Farah flap is similar to the fight between Procter & Gamble Co. and Clorox Co. On July 8, Neil DeFeo, the former top global planner for P&G's detergent business, left to become group vice-president for U. S. operations at Clorox. P&G accuses DeFeo of breaching a written contract and of seeking out sensitive information just before his departure about its bleach and household-cleaner markets—which compete head-on with Clorox. In a statement, P&G Counsel James J. Johnson calls DeFeo's actions "the most serious breach we've seen of an employee's contractual agreement."

DeFeo denied the allegations. He issued a statement when he was sued, noting that he was "disappointed and shocked" at P&G's allegations. Clorox countersued to invalidate DeFeo's contract. It says "discussions are ongoing" to resolve the dispute.

NO STANDARD. The question many companies are asking themselves: Are most noncompete agreements worth the paper they're written on? The answer: It depends. There is no uniform standard for handling such tussles. Rather, courts will scrutinize whether the agreements are reasonable in their duration and scope and whether they unnecessarily keep an employee from earning a living. "Noncompete agreements are like fingerprints," says Jonathan Marshall, a trade-secret expert. "They look the same from a distance, but you realize that no two are alike."

Whether they have a good case or not, a number of companies are finding that going to court is the best weapon against potential defectors. The suits send a message to employees and rivals alike that predatory maneuvers won't be tolerated. "Companies need to cultivate a reputation of being tough, but fair," says Marshall. "They definitely don't want to be looked upon as patsies." For a growing number of companies, nurturing a tough-guy image has become just another cost of doing business. And in the end, who really benefits? The lawyers—as usual.

By Linda Himelstein, with Laura Zinn in New York and Zachary Schiller in Cleveland

PROTECTING THE COMPANY JEWELS

GUARD DOCUMENTS	Restrict access to sensitive documents and mark them "confidential"
GET IT IN WRITING	Spell out exactly what belongs to the company and what belongs to the employee, preferably before the employee starts work
KEEP CONTRACTS SPECIFIC	Have employees with access to confidential information sign contracts promising not to disclose the data or work for a rival soon after quitting
GO TO COURT	If all else fails, be ready to sue

DATA: BUSINESS WEEK

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Commentary/by Kevin Kelly and Kathleen Kerwin

THERE'S ANOTHER SIDE TO THE LOPEZ SAGA

The López affair just won't die. Detroit and Germany alike seem transfixed by General Motors Corp.'s increasingly credible allegations that its former purchasing guru, José Ignacio López de Arriortua, and his aides stole and shredded sensitive GM documents when he defected to Volkswagen in March.

What the headlines obscure is López' legacy, far less publicized, at GM. During his nine-month reign atop GM's North American purchasing department, López and underlings employed heavy-handed tactics in an attempt to slash $4 billion from the auto maker's parts bill. GM, now pushing prosecutors in the U.S. and Germany to nail López for industrial espionage, apparently tolerated many questionable strategies when López turned them on its own suppliers.

GM Chief Financial Officer G. Richard Wagoner Jr., who assumed López' duties in April, admitted as much in a speech to suppliers in Traverse City, Mich., on Aug. 6. In its rush to cut costs, GM communicated poorly with suppliers and, in a few instances, leaked their proprietary information to the competition, Wagoner said, acknowledging that "there have been some cases where we have beEn out of bounds."

TORN CONTRACTS. GM is now in a sticky ethical situation. As Carnegie Mellon University Management Professor Gerald C. Meyers, who once headed American Motors Corp., puts it: "When it's used for GM, it's a boon. When it's used against them, it's a terrible thing."

Even the largest and most powerful of GM's suppliers are unwilling to detail López' purported tactics on the record, for fear of angering their largest customers. However, dozens have privately outlined their experiences to BUSINESS WEEK.

López, they say, often tore up long-term contracts. Indeed, a recent survey of 110 automotive suppliers by research firm ELM International Inc. found GM had reopened contracts "frequently" 10 times more often than Ford Motor Co. Suppliers also allege that López exaggerated rivals' bids to compel them to bid lower still. And even when López sent teams of engineers to suppliers' factories to help them cut costs and promised to share the savings with them, "he shared it 100% with GM," grouses another supplier. López won't comment on the claim, or on any of the suppliers' allegations. Neither will GM.

GM suppliers weathered Lopez' heavy-handed tactics—and then heard the executive dismiss their complaints as "sour grapes"

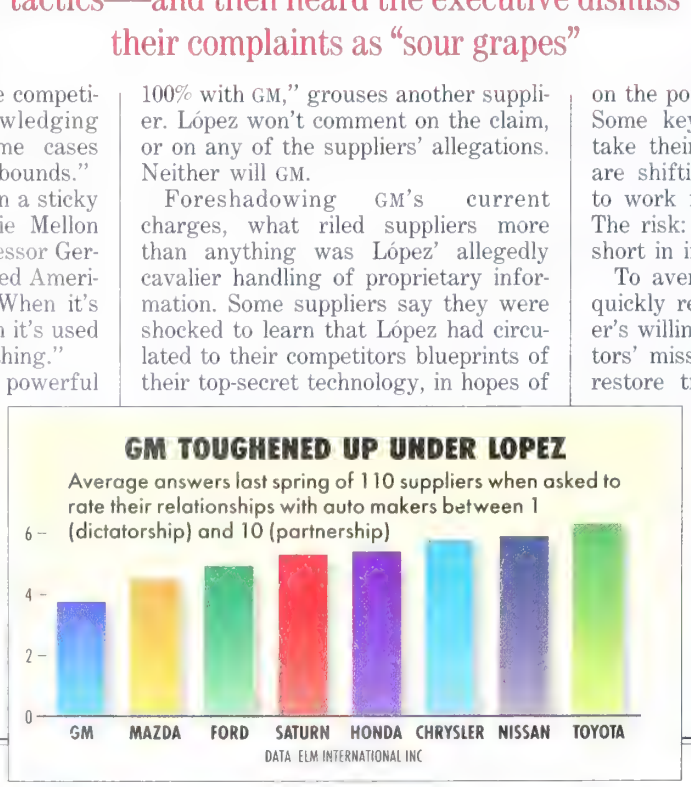
Foreshadowing GM's current charges, what riled suppliers more than anything was López' allegedly cavalier handling of proprietary information. Some suppliers say they were shocked to learn that López had circulated to their competitors blueprints of their top-secret technology, in hopes of eliciting lower bids. That made it ea for competitors to underbid, since th didn't have to recoup research and d velopment costs. "If there's anythir that sends a supplier through the ce ing, it's taking our information, o [blue]prints, to our competitors," sa Timothy D. Leuliette, head of ITT Aut motive. Leuliette wouldn't say wheth that happened to ITT itself but co firmed that he knew "some instances."

DAMAGE CONTROL. The EL survey showed just ho GM's vendor relations ha frayed (chart). Of a doze North American companie GM ranked last in profe sionalism, cooperation, ar communication. "It's an a tounding fall," says Paul Haelterman, business-deve opment manager for Dou las & Lomason Co., a ca seat maker in Farmingto Hills, Mich. "Before, GM purchasing staff was th most professional and eth cal one around."

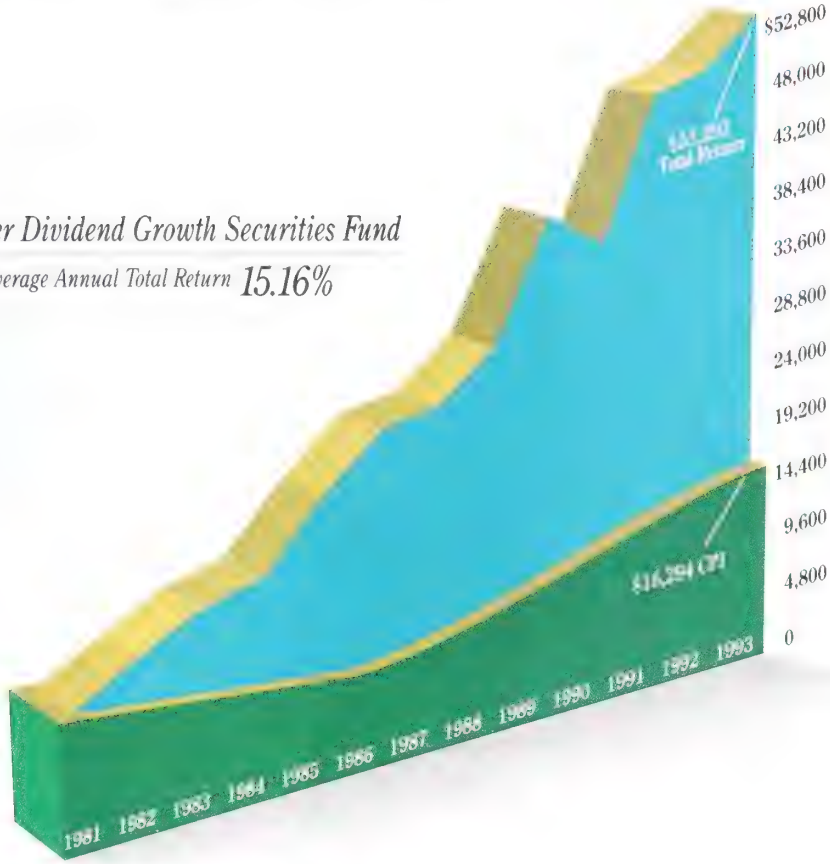
VW says López has starte to work his magic in E rope: His measures, CE Ferdinand Piëch says, wi save over $410 million th year. Pretty dramatic, bu VW might do well to refle on the potential fallout now facing G Some key suppliers are reluctant t take their new technology to GM an are shifting their brightest engineer to work for Ford and Chrysler Cor The risk: Future GM products will fa short in innovation and quality.

To avert that catastrophe, GM mus quickly rebuild supplier trust. Wago er's willingness to discuss General M tors' missteps is a good start. But t restore true credibility, GM needs t demonstrate that it won rely on the kind of tactic López allegedly employe And GM must not use its r lentless pursuit of López i Europe to evade that toug responsibility.

Kelly reports on parts su pliers from Chicago. Kerwi follows the auto industr from Detroit.



Don't you wish you had seen this ad in 1981?



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PEOPLE

A KNIGHT WITH THICK ARMOR FOR IBM

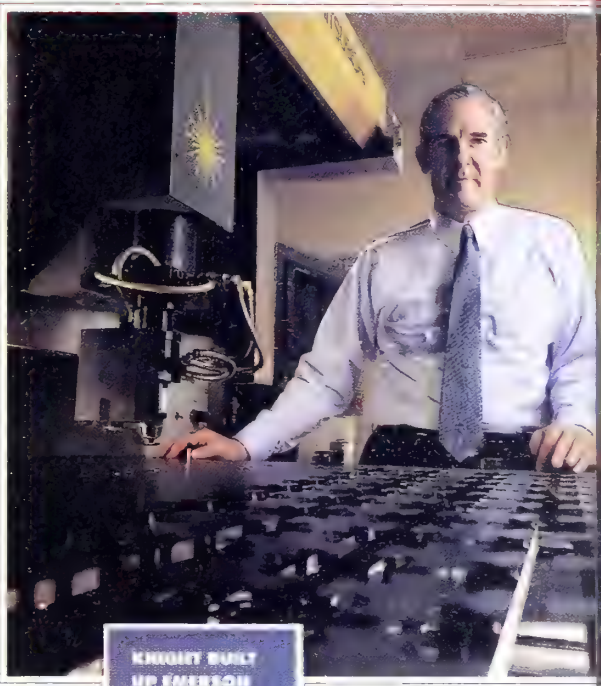
Emerson's tough CEO may help Gerstner retrench

Last October, 50 United Auto Workers noisily picketed outside the gates of Charles F. Knight's tony suburban St. Louis residence. The Emerson Electric Co. chairman is no friend of organized labor: He ties 10% of his division managers' bonuses to keeping their plants union-free. But the UAW singled out Knight because he is a director of Caterpillar Inc., which the union wanted to pressure into reopening contract negotiations. The tactic failed: Neither Knight nor Caterpillar has budged from the company's last offer, and talks remain at an impasse.

In this age of constant corporate restructurings, executives who don't fear bare-knuckle confrontations are in high demand—and Chuck Knight is no exception. Indeed, he recently took on a passel of new problems when he agreed to become IBM's newest director. That's hardly an enviable assignment. On July 27, Big Blue reported the second-largest quarterly loss in corporate history—$8 billion—as it took an $8.9 billion charge for 35,000 layoffs and other restructuring moves. More recently, Knight has been mentioned as a possible successor to Kay R. Whitmore, the ousted Kodak chief. Emerson even broke its long-standing policy of not commenting about rumors to proclaim that Knight "is not a candidate."

BULLET-BITING. Why does Knight's name come up when there's a tough job to be done? Although he served with new IBM CEO Louis V. Gerstner Jr. on the Caterpillar board, he is little known to the general public and rarely talks to the press. But he's admired in top executive ranks for racking up a nearly matchless string of record earnings, while building Emerson into a world-class manufacturer. The Emerson CEO also has participated as a board member in overhauls at troubled British Petroleum Co. and Caterpillar. Says BP Chief Executive David A. G. Simon: "If there are bullets to be bitten, he will not hesitate to say, 'Go bite them.'"

It's true that outside directors don't typically have huge influence over companies' restructurings, but IBM recently changed its board to give the directors more say. If Knight takes an active role, his experience could be key: He's a skilled strategist with top-notch manufacturing knowhow and financial acumen—all the things that presumably attracted IBM. The negatives: He's no technology guru, and he may be getting stretched too thin.

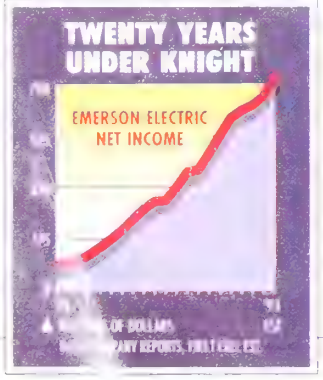


KNIGHT BUILT UP EMERSON AND HELPED OVERHAUL BP

He certainly has had his hands full at Emerson. At 57, he has been its chief for 20 years and has made it a tough competitor in such largely mature and unglamorous markets as motors and valves. But Knight has reduced Emerson's dependence on supplying lower-margin goods to U.S.-based appliance and other consumer-durables makers by moving into faster-growing global markets, such as process controls. He also has shifted some underperformers into joint ventures, while expecting Emerson's remaining divisions to hack out 6% to 7% of costs each year.

The repositioning has worked. Products developed within the past five years bring in 23% of sales, vs. 9% in 1982. About three-fourths of all sales come from products with No. 1 or No. 2 global positions. In fiscal 1993, ending Sept. 30, profits will grow 8% on sales of $8.3 billion, to about $716 million (chart).

Once Knight sinks his teeth into a job, he doesn't let up. At beleaguered British Petroleum, he joined with the rest of the board in the 1992 dismissal of Chairman Robert Horton, a friend. And as a trustee for Washington University in St. Louis, he led a 1981 study of its business school that made sweeping recommendations to improve its quality and reputation. Although Knight is no longer a trustee, "he has remained involved right up to today," says Dean Robert L. Virgil, "questioning me about things," such as choosing faculty. school has climbed into top 20 in BUSINESS WE rankings.



Knight's hard-charging style run the family. His father founded Leste Knight & Associates Inc., a Chicago gineering consulting firm. After ear a bachelor's degree in mechanical neering and a master's in business Cornell University, Chuck joined family business and served as a co tant to Emerson before being recru at 37, as heir apparent. Now, his o son, Lester B. Knight, 34, is risin Baxter International, where he man the $4 billion hospital-supply busine

With so little free time, why is Kr taking on the huge headache of joi IBM's board? He isn't talking, but rector who sits with him on one b says he accepted the post only reluc ly. After all, Knight already serve five other boards, including Ba Southwestern Bell, and Anheuser-Bu and is active in a number of commu groups. Another director worries Knight is becoming "overstretch adding: "We don't see him as regula at meetings.

For publicity-shy Knight, perhaps biggest challenge will be adjustin the visibility of the new assignment isn't likely to run into union problem Big Blue, but he won't be able to the intense spotlight focused on e move made by the struggling comp giant. But if Knight does help IBM new path, publicity is a problem he probably live with.

By Lois Therrien, with Richard Melcher, in Chicago

&C for Human Potential

"Driving the ten-year-old second car didn't worry me—until my job moved down the road fifty miles. For his own peace of mind, my husband gave me an NEC portable phone. I didn't realize what a good idea it was until the fan belt broke in the middle of nowhere."

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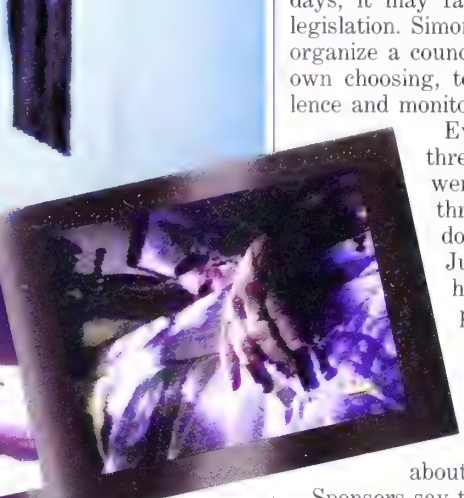
TELEVISION

CONGRESS IS SCREAMING BLOODY MURDER

And the TV networks and advertisers are running scared



Grisly made-for-TV movies such as NBC's Cruel Doubt *are dependable ratings-pullers*

Michael Neavill thought little of it when he bought commercial time in *Murder in the Heartland*, a television movie that aired on ABC in May. As broadcast director of American Telephone & Telegraph Co., Neavill buys spots for AT&T in 25 to 30 shows a day, every day. *Murder in the Heartland*, he felt, was a gripping drama about mass murderer Charles Starkweather.

Two months later, in July, AT&T's name came up at a congressional hearing as a company that helps promote violence on TV. And Neavill later discovered that even some of his colleagues thought the film was an inappropriate choice. Now, AT&T is tightening its standards for advertising on violent programs. But first, it must determine when and where violence crosses the line. "There's a lot of room for interpretation," says Neavill.

No kidding. As advertisers and television networks firm up their fall seasons, they are grappling with a mushrooming congressional outcry against TV violence. Industry experts attribute the clamor to a coalescence of trends: a recent spate of grisly TV movies such as *Murder in the Heartland*, fresh publicity about teenage violence, and a growing acceptance of research that says TV's "glamorize violence can lead to the uglier variety the nation's streets and in its scho "The mood is that we have to do so thing," says Senator Paul Simon (D-I a leading critic of TV violence.

The networks and their sponsors w to act before Congress does. But clampdown is giving them a headac Sponsors worry that they may be s matized if they advertise on progra with less than snow-white ratings. A media executives say Congress has fairly singled out the four major bro cast networks, instead of cable and s dicated TV, where much of the tr violent programming now airs.

BLUE CHEESE. Senator Simon turned the heat on Aug. 2 in remarks to a c ference of entertainment executives Beverly Hills. He warned them tha Hollywood doesn't show it is commit to stemming television violence withir days, it may face tough congressio legislation. Simon wants the industry organize a council, with members of own choosing, to set standards on lence and monitor network complian

Even before Simo threat, ABC, CBS, and were running scared. T three had already to down their programs. June, after congressio hearings, they agree place parental advis ies on violent progra starting in Septemb In addition, ABC set up an 800 num to offer informat about violent shows.

Sponsors say they support such wa ings—so long as they have the freed to make their own judgments about p grams. "We cannot let the netwo override our own screening procedure says Philip Guarascio, general mana of marketing at General Motors Co But Guarascio admits that, given controversy, GM would think twice fore appearing in such a show. Inde media buyers say advertisers are ba ing at *NYPD Blue*, a new police drama ABC that will carry a warning for tou language and partial nudity.

With their big audiences and a f provocative shows such as *NYPD Bl* the broadcast networks have become easy target for Congress. But e some activists point out that many the extremely violent programs no lo er air on ABC or its rivals. "The ma problem is with independent stations a cable," says Leonard Eron, a profes of psychology at the University of Mi gan and vocal critic.

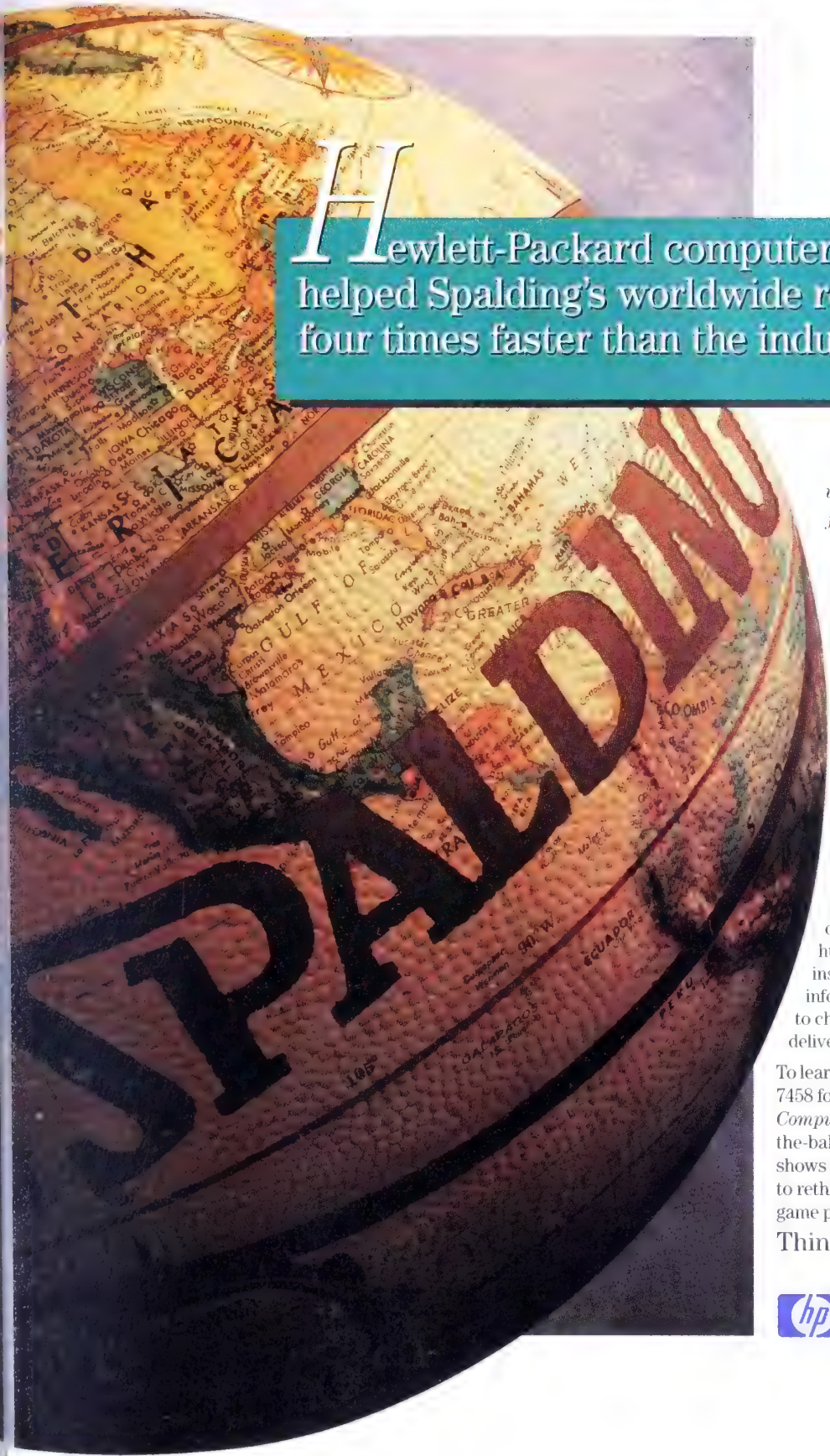
In the upcoming network season,

MAYHEM ON THE TV SCREEN

Some programs and their violence quotient:

Program (Network)	Violent acts per hour*	Rating**
TOP COPS (CBS)	38	10.7
FBI: THE UNTOLD STORIES (ABC)	28	9.5
AMERICA'S MOST WANTED (FOX)	20	7.1
IN THE HEAT OF THE NIGHT (CBS)	13	12.3
UNSOLVED MYSTERIES (NBC)	10	14.6
COPS (FOX)	9	8.7

*From the National Coalition on Television Violence (Sep.-Nov. 1992)
**Each point equals 930,000 TV households (Sep.-Dec. 1992)
DATA: NCTV; A.C. NIELSEN CO.



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example, comedies will take up 29% of the total schedule, one hour more than last year. By contrast, reality programs, which rate high for violence (table, page 30), will drop from 9½ to 5 hours per week. Action shows are on the wane, too, because they are costlier and get lower ratings than sitcoms. Many have migrated to cable, where mass audiences are not so crucial, or into syndication, where studios can cut better deals. Violent made-for-TV movies, however, are still thriving. Flicks such as *Murder in the Heartland* and NBC's recent *Cruel Doubt* are cheaper to make than feature films and get reliable ratings.

Hollywood's chief lobbyist, Jack Valenti, insists the TV industry has gotten the message about violence. Over the next six months, he plans to meet with producers, directors, and screenwriters to discuss "how you retain dramatic narrative and at the same time reduce violence." But given the mixed feelings of sponsors and the many new places violence turns up on TV, few think Valenti can resolve this issue anytime soon.

By Mark Landler in New York, with Mark Lewyn in Washington and Ronald Grover in Los Angeles

MOVIES

BOMBS AWAY

Tri-Star isn't printing extra tickets for Woody Allen's latest

Everyone was worried. Sony Pictures Entertainment moguls were camped out at Santa Barbara's swanky Biltmore Hotel. Honchos at Sony's Columbia Pictures unit were whispering about the names to be found in the "Hollywood Madam's" infamous black book of clients. The next day, the talk was more prosaic: Execs from Columbia's sister company, Tri-Star Pictures Inc., fretted over their brilliant, angst-ridden director whose real life sells better than his films.

The Madam will fade. But Woody Allen's problems likely won't. The 57-year-old filmmaker hasn't scored at the box office in years. Now, after months of legal tussling with longtime lover Mia Farrow amid charges of child abuse, Allen is a bona fide nightmare for marketers. Namely, for Tri-Star, which will bring Allen's latest work, *Manhattan Murder Mystery*, to theaters on Aug. 18.

LOSE THE MONEY. Publicly, Tri-Star, which paid an estimated $20 million to make *Mystery* and another $5 million for promotion, is playing it cool. It's only making 250 prints of the film, less than a third the number it released of Allen's 1992 *Husbands and Wives*. But "we are presenting this film in a traditional way for all Woody Allen films," says Buffy Shutt, president of marketing.

The thing is, traditional hasn't been working so well. Since his 1986 hit, *Hannah and Her Sisters*, Allen's films have grown darker and their ticket sales weaker (chart). Last year, *Husbands and Wives*, released just as his legal battle with Farrow began to heat up, lost an estimated $10 million. "His films have always had a small audience of mostly urban intellectuals," says box office follower John Krier, president of Exhibitor Relations Co. "And now he's losing a lot of them as well."

CRIES AND SNICKERS: KEATON AND ALLEN IN *MANHATTAN MURDER MYSTERY*

That's one reason, say Hollywood insiders, that Tri-Star released Allen in July from his obligation to make the last of three films in his contract. Allen will make future movies with former *Saturday Night Live* producer Jean Doumanian. Both sides say they parted on friendly terms. Tri-Star could still distribute Allen's films, a company spokesman is quick to point out, and Tri-Star Chairman Michael Medavoy remains an Allen loyalist. But rival executives say Tri-Star had tired of Allen's poor box-office showing, and Woody was miffed at what he saw as Tri-Star's ineffectual marketing of *Husbands and Wives*.

In the meantime, though, Tri-Star has one last film to sell. And that presents quite a marketing challenge, given that trailers of *Mystery* provoke snickers, whispers, and a few hisses.

What to do? Tri-Star has started sneak previews of the film weeks ahead of time, placing it at multiplexes alongside *The Firm* and *The Fugitive* in hopes of siphoning off crowds that couldn't get into those sold-out shows.

It is also keeping Allen off American television, which he hates anyway, and is offering up co-star Diane Keaton for the obligatory *New York Times* interviews. Allen, who faced a particularly nasty barrage from New York reporters for months, instead did interviews with friendlier writers for Chicago papers. He may give TV interviews in Europe. Tri-Star's marketing team also will trot out co-star Anjelica Huston. Riding a modest wave of popularity based on her last film, *The Addams Family*, Huston will appear on *Good Morning America* and probably *The Tonight Show*.

For the most part, however, Tri-Star will just cross its fingers. One thing the studio has going for it may be the film itself. *Mystery*, the story of an amateur sleuth's attempt to solve a murder case, is both a return to Allen's earlier filmmaking and far funnier than his recent fare. Plus, the summer box office is bustling, with total ticket sales about 2% ahead of last year. The timing is not at all bad for a skinny comedy with crummy karma. But the guys at Tri-Star still are nervous.

By Ronald Grover in Los Angeles

SPIELBERG HE AIN'T

The relatively anemic box-office sales of Woody Allen's recent films

		Revenue Millions
1986	HANNAH AND HER SISTERS	$40.1
1987	RADIO DAYS	14.7
1987	SEPTEMBER	0.4
1989	CRIMES AND MISDEMEANORS	18.0
1991	SHADOWS AND FOG	2.7
1992	HUSBANDS AND WIVES	10.1

DATA: EXHIBITOR RELATIONS CO.

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EDITED BY KEITH H. HAMMONDS

THIS, TOO, SHALL PASS

One lesson of this year's CEO firings and resignations: They don't change companies' stock values much, at least initially. True, the boss's departure often triggers a sell-off—or, in Kodak's case, a big gain—the next day. But one month later, prices often settle back to their previous levels:

1 month before	Day after	1 month after
AMERICAN EXPRESS James Robinson		
25 1/8	24 5/8	24 5/8
GIDDINGS & LEWIS William Fife		
26	22 1/2	24 3/4
IBM John Akers		
52 3/4	49	53 3/4
SUNBEAM OSTER Paul Kazarian		
17 1/4	15 7/8	18 3/8
TAMBRANDS Martin Emmett		
46	44 5/8	46 1/4
WESTINGHOUSE Paul Lego		
12 7/8	13 3/4	13 3/8
EASTMAN KODAK Kay Whitmore		
50 1/8	59 7/8	?

DATA: BRIDGE INFORMATION SYSTEMS INC

AMERICAN'S FARE WAS FAIR

▸ Tough competitor or predator? American Airlines convinced a federal court jury on Aug. 10 that it wasn't the bad guy after all. Jurors cleared the carrier of charges that it tried to use a simplified pricing scheme and a half-off fare sale last summer to drive two rivals out of business.

American ultimately abandoned its "value pricing" in the face of millions of dollars in losses of its own. But Continental and Northwest were seeking $1 billion in damages, which would have been tripled under antitrust law. Both say they're considering an appeal, but the case only reinforces the notion that predatory pricing is nearly impossible to prove. In the face of high-profile lawyers and arcane economic theory, the Galveston (Tex.) jury returned its verdict in less than three hours. "This verdict will be very discouraging to future predatory-pricing cases," predicts Garret Rasmussen, a lawyer for cigarette maker Brooke Group in an unsuccessful antitrust case against Brown & Williamson Tobacco.

SNACKS, BALLOONS, AND A RECALL

▸ Saturn wants you to believe that having your car recalled is a picnic. The General Motors division is recalling every car it made before Apr. 15—that's 380,682 in all—to replace generator wiring that has caught fire in 34 cars. Saturn hasn't really explained why the generators short-circuited in the first place. But its sterling reputation for quality is on the line. So dealers are pitching tents to handle the overflow, and some are offering balloons, barbecue, or coffee and doughnuts to placate waiting customers. Saturn says it will take mechanics 22 minutes to replace the 10-inch wire. Analysts estimate the recall will cost at least $8 million.

WESTINGHOUSE SLIMS DOWN

▸ One down, three to go. As part of the company's much needed restructuring program, Westinghouse Electric on Aug. 11 agreed to sell its electric distribution and control unit to Cleveland-based Eaton for $1.1 billion. The proposed deal marks the first major action for new Westinghouse Chief Executive Michael Jordan. It's also the first step in his company's plan to sell off four units by late 1994 to reduce its debt of more than $5 billion. Westinghouse is now looking for customers for its electric- office furniture, and tial real estate subsidia

SO WHO'S DOING THANKSGIVING THIS YE

Could a family feud get much nastier? First, Dart Group Chairman Herbert Haft fired his own wife, Gloria, and son, Robert. On Aug. 10, Gloria Haft filed for legal separation, accusing Herbert in a court filing of numerous affairs with other women, physical abuse, and a financial "blitzkrieg of illegal activity" in recent months to maintain control of the family business empire.

That empire includes Crown Books, Trak Auto, Sl Food Warehouse, and real estate around the Was (D. C.) area. The family is now sharply divided, with and his youngest son, Ronald, 34, on one side and Robert, 40, and daughter Linda, 43, on the other. Ea August, Herbert installed Ronald, who had run the real estate operations, as president and chief operating of Dart, replacing former favorite son Robert.

In court papers, Gloria is seeking to put the Haft property into the hands of a "special fiscal agent" wh protect her interests. Gloria alleges that Herbert has ened to financially ruin her, Robert, and Linda if she d back off the suit. And, she contends, Herbert paid Ron million to help enlist his support. Herbert denies charges; Ronald could not be reached.

SUPERSONIC MARIO BROTHERS

▸ O. K., maybe you did for it specifically. E yearend, you could be Super Mario World o flight to London. On A the U. S. subsidiary o nese videogame make tendo introduced a ver its home entertainme tem for airplanes, hote even cruise ships.

Travelers will get t the same 16-bit videc their kids play at hom as if that weren't eno keep fliers occupied f hours, Nintendo will of in-flight movies, elec shopping, and CD-quali sic, all using a tiny screen mounted to the back. The system sho installed in over 50 west, Virgin Atlantic, a na Air Lines planes thi

LOOKING FROM TOP RIGHT: ILLUSTRATION BY M. E. COHEN; PHOTOGRAPH BY MARK S. BERNSTEIN/LIMPHOTO; CARTOON BY DANA SUMMERS/ORLANDO SENTINEL

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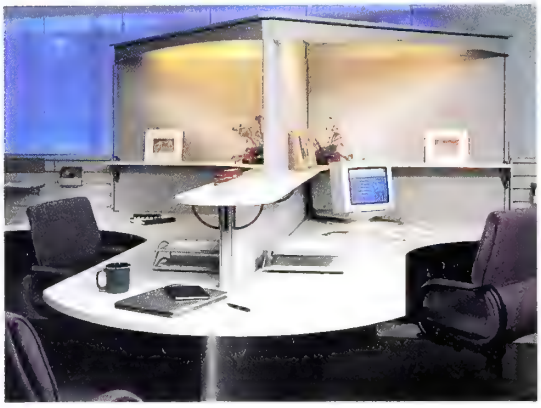

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EDITED BY STEPHEN H. WILDSTROM

OW CLINTON MUST FORGE CAPITOL HILL COALITION

n sports, a win is a win, no matter how close the score. By that rule, President Clinton is entitled to claim that passage of his budget—and his earlier victories on family e and national service—show he's making headway in resing 12 years of Republican rule.

he victory, however, was ugly and cost Clinton much of political capital he'll need for the difficult fights ahead on lth care, trade, and welfare reform. Still, if the Clintonites smart they'll take away some lessons from the budget iggle that will serve them well.

r starters, Clinton the candidate was utsider, promising to smash gridlock bring change to Washington. Clinton President turned out to be too much consummate pol, readily cutting deals casting his fate with the entrenched, ral congressional leadership.

AR. It's late, but Clinton can regain his sider status and his claim to be a ocrat of new ideas. That would help back some of Ross Perot's followers. key is standing up to Congress. A ly for the centrist Democratic Leader- Council by White House pollster ley Greenberg found that Perot back- have chillier feelings toward Congress toward any other institution. Con- ss, he writes, "seems to represent ything these voters dislike about politics in this age."

ow can Clinton go to war with Congress and still hope to ail in legislative battles to come? That delicate feat, say experts, will require two actions Clinton failed to take in budget fight. He must sell his case directly to the Amer- people, and he must build coalitions on Capitol Hill that t depend on either party's leadership.

linton's economic program was launched brilliantly by his ruary State of the Union speech, which sounded New ocrat themes of individual responsibility and private enterprise. But the Administration let the GOP take control of the debate when it clung to a stimulus package funding many old-style programs. Not until the last days of the battle did the White House make inroads against GOP charges that the budget was just another tax-and-spend plan. Clinton "has to sell a plan to the people in a way that they understand what they are getting," says DLC President Al From. "If he can build popular support, he will find sledding a lot easier in Congress."

Clinton's reliance on the Democratic leadership helped turn the budget into a partisan civil war. He can't afford another. Because of divisions among Democrats, health-care reform and the North American Free Trade Agreement can win only if they get bipartisan backing. Coalition-building offers a side benefit for Clinton, too. "He needs to broaden his base of support sufficiently so that no one can hold him hostage," says political scientist Allen Schick of the University of Maryland.

DID HE LEARN FROM THE BUDGET FIGHT?

The White House seems to be learning. Hillary Rodham Clinton, who heads the health-care task force, has been meeting with GOP Senators John H. Chafee of Rhode Island, James M. Jeffords of Vermont, and Dave Durenberger of Minnesota. And on Aug. 11, the Administration announced a tough crime bill that may unite fractious Democrats and draw Perot voters and Republicans. "We're anxious to work in a positive way with Republicans," says White House aide Mark Gearan.

If Clinton wants to build a broad new coalition, he must continue to move in this centrist direction. But it will take strong leadership. "There's always a constituency for the old way," says From. "But there's no readily apparent constituency for a new approach. The bias is to save the old." Giving in to that bias almost doomed Clinton in the budget fight. Going to war on Washington inertia could revitalize his Presidency.

By Susan B. Garland

ITAL WRAPUP

GULATION

longress may soon join the skirmish between the Food & Drug Admin- ration and the makers of dietary plements. Although the industry ims the agency is trying to deny sumers access to vitamins and her- products, the FDA says its policy is limbo. "Our strategy is not to in- ase enforcement," says an official. e want Congress to draw the lines" an industry crackdown. Indeed, presentative Henry A. Waxman (D- if.) and Senator Edward M. Ken- ly (D-Mass.) are considering legisla- that would codify oversight of an ustry that's largely ignored by regulators. They may require that supplements be safe but not demand the proof of effectiveness required for drugs. But makers would only be able to make claims backed by scientific evidence, ruling out many of the wilder assertions now made by manufacturers.

ENVIRONMENT

The White House is bagging plans to unveil a blueprint for reducing U. S. greenhouse gases just before an Aug. 16 international meeting on global warming in Geneva. White House officials say they need more time to lay political groundwork for the effort, which will affect nearly every industry. The plan now is due out in September.

LEADERSHIP

Representative Charlie Rose (D-N. C.) is launching a campaign for House Speaker—even though Thomas S. Foley (D-Wash.) isn't leaving his post. To pressure Foley to move aside, Rose, chairman of the House Administration Committee, has created a leadership PAC to funnel campaign contributions to colleagues. Members say Rose has spread reports that Foley might be named ambassador to Britain, a post likely to go to Admiral William Crowe (Ret.). Rose has asked for support in a race for Speaker against Majority Leader Richard A. Gephardt (D-Mo.), the favorite if Foley steps down.

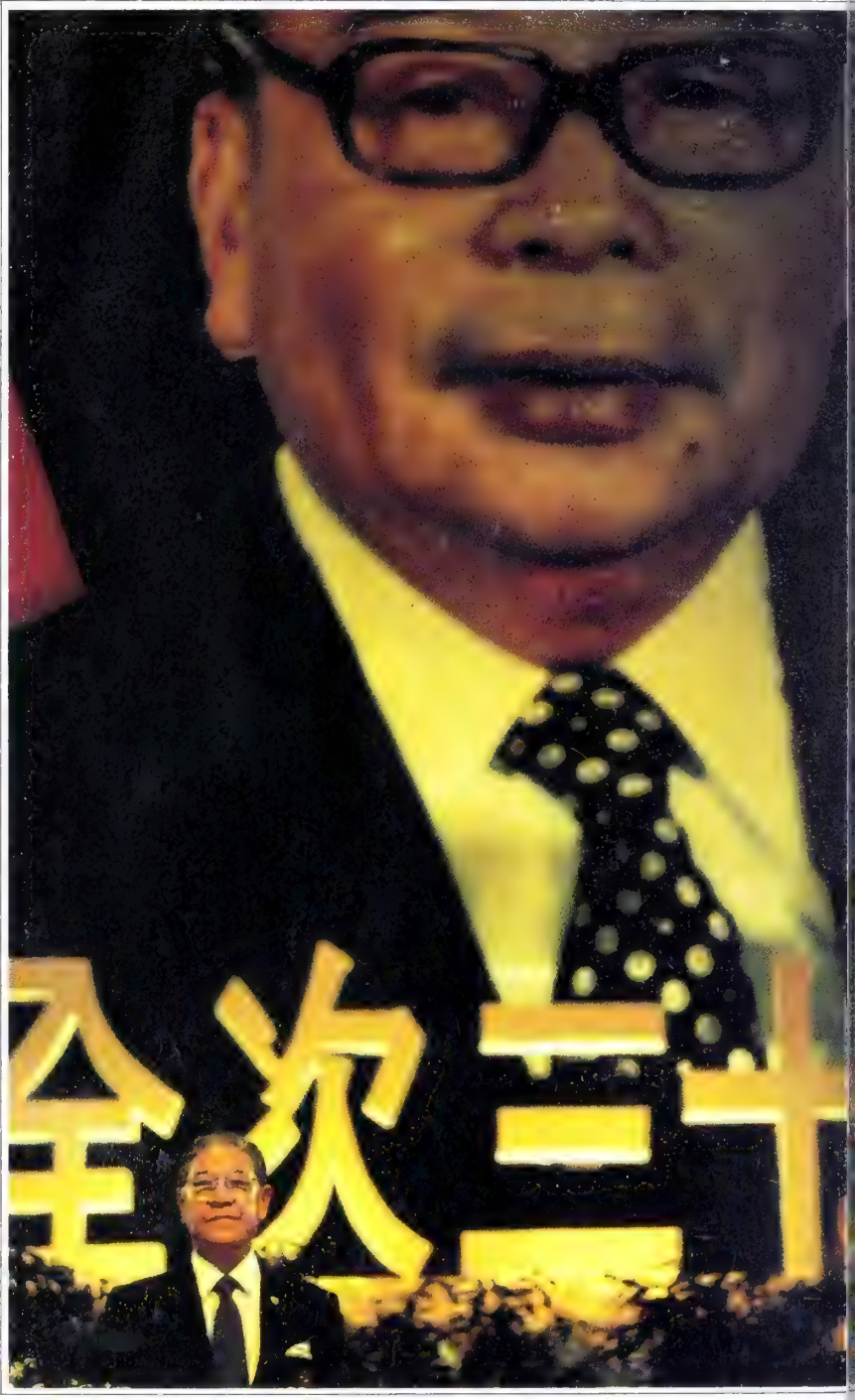
GAMMA-LIAISON

SUDDENLY, ALL BETS ARE OFF IN TAIWAN

The opposition's growing power is shaking the ruling party—and throwing business into a tizzy

Two years ago, it seemed Taiwan was going to be the next big player in world aerospace. After all, the government and its wealthy friends planned to invest billions in Taiwan Aerospace. Nobody was paying much attention to some noisy critics of Taiwan's ruling party. But when Taiwan Aerospace signed a $2 billion deal with McDonnell Douglas Corp., angry opponents tore the scheme apart. Now, a less ambitious plan to build narrowbody jets with British Aerospace PLC is also in trouble. Once, Taiwan had a chain of command that was clear, says the shaken president of Taiwan Aerospace, Denny R. S. Ko. But "like a lot of people, I misread the breadth of political change."

Executives such as Ko are waking up to a revolution in Taiwanese politics. Big deals clinched with handshakes between political power brokers are falling apart. Multibillion-dollar public-works projects are gunned down by opposition politicians. Ambitious industrial policies to put Taiwan on the map in aerospace and high-tech electronics are up for glaring reexamination.



PRESIDENT LEE TENG-HUI IN FRONT OF A PHOTO OF CHIANG KAI-SHEK'S SON, CHIANG CHING-KUO

TIES THAT BIND? After four decades of dictatorship, the ruling party, the Kuomintang (KMT), is losing its grip on political power. On Aug. 10, a group of key KMT legislators announced that they were leaving the party. They said their New Party, as it's called, would base its platform on clean government. If the reformers can cut the close ties between government and big business and create a more open economy, they will not just wield new power but also set a new direction for Taiwan. The implications will reach across Asia. If Taiwan can move toward democracy while maintaining steady economic growth, it will help discredit the argument that Asians have to choose between a democratic society

ZILBERMAN SYGMA

l a healthy economy. 'o succeed, Taiwan's v political class ds to quash the cur- t alliance between l-connected business lers and the ruling ty. Currently, state- enterprises in steel, and heavy industry ount for 20% of ss capital formation. ics want a decen- ized economy led by ynamic private sec- that, despite govern- it opposition, has al- dy invested some billion in China. iness leaders want van to increase ties ı the mainland and ome the managerial er for an emerging ater China.

OPPOSITION PARTY DEPUTY HURLING A CHAIR DURING A BRAWL AT THE NATIONAL ASSEMBLY IN '92

mong the major parties, only the Party seems in step with the busi- community on China policy. The still bans direct commercial links the communists. The largest opposi- group, the Democratic Progressive y (DPP), wants to renounce all claims hina and declare independence, but ing has threatened to invade if that ens. The New Party wants closer with China but not Taiwanese inde- lence—a policy likely to win voters are dissatisfied with the KMT yet of the DPP's hard line.

e rebels are led by former net members Jaw Shao- , 42, and Wang Chien- , 55. They were the top -getters among all Taiwan- politicians in last year's lative elections. They run icularly strong among mid- lass urban voters who ad- their anticorruption plat- . Their New Party nands enough swing votes efeat President Lee Teng- KMT in critical policy bat- because the DPP controls t a third of the seats in the legislature—where ani- ties regularly lead to fisti- . Pollsters say the KMT suffer more losses in local ions this fall.

STRATING." So far, the sition to democracy hasn't he overall economy, which ll growing at a 6.2% annu- lip and running healthy surpluses. But if the po- l situation worsens, some iess leaders worry, Taiwan start falling behind in in- nents needed to keep pace with Asia's other Tigers. "Major things that should be done right now are getting debated and discussed to death," frets Chen Chi-chu, a general manager of state-owned International Commercial Bank of China.

As the factional feud deepens, some key government programs are being attacked because they are closely identified with the ruling clique. For example, top officials at the Industrial Technology Research Institute, a massive bureaucracy charged with leading research and development in high-tech areas ranging from multimedia to semiconductors, are seen as members of the KMT old guard. Last month, the legislature slashed ITRI's $200 million annual budget by 20%. "The transition is very frustrating," says Lance Wu, who heads ITRI's multimedia and HDTV programs. "We no longer have the efficiency of authoritarianism and don't yet have the advantages of democracy."

At the center of the debate: how to clean up money politics and curb rampant boondoggle projects. Most KMT lawmakers have strong ties to powerful financial interests and state-run enterprises. The New Party and the DPP want to privatize the state sector and divert more funds to small business.

Infrastructure projects have also become a major battleground. Over the next decade, some $250 billion will be spent on everything from highways to power plants. Last month, DPP and KMT rebels killed funding for a $17 billion high-speed railroad that was a showcase for the infrastructure plan.

President Lee has been clumsy in handling the political crisis. His supporters have stacked key committees for the party's upcoming congress, set to begin on Aug. 16. That prompted the reformists to bolt the party. Even some KMT legislators say this shows that the KMT is intent on preserving the authoritarian legacy of Chiang Kai-shek and his son Chiang Ching-kuo. "Why try to preserve a Leninist structure brought from China?" asks Wei Yung, a KMT lawmaker.

In order to stay in power, the KMT will have to respond to the reformers. Eventually, that will result in a more democratic society and an open economy hitched to China. The evolutionary process is awkward, but a new breed of Asian Tiger is now emerging.

By Pete Engardio and George Wehrfritz in Taipei

HOW THE KUOMINTANG IS LOSING ITS GRIP

PARTY POLITICS

KMT is frustrated as key lawmakers form New Party

INFRASTRUCTURE

Legislature has rejected funding for the showcase $17 billion high-speed rail project

CORRUPTION

Lawmakers are launching probes of payoffs in public works

INDUSTRIAL POLICY

Budget for high-tech research has been slashed by 20%, and plans to create a world-class aerospace industry by linking government-backed Taiwan Aerospace and British Aerospace have sputtered

STATE COMPANIES

Legislators want more privatization and are demanding greater oversight of all capital spending by state-owned enterprises

CHINA LINKS

Taiwanese businessmen have ignored the KMT and invested some $10 billion in the mainland

DATA: BUSINESS WEEK

TING/AFP

SOUTH KOREA

IS KOREA BLOWING ITS BIG CHANCE?

Political gridlock is stalling an economy that could be leaping ahead

STRIKERS AT HYUNDAI: UNIONS, BUREAUCRATS, AND THE *CHAEBOL* ARE ALL RESTIVE

The atmosphere seemed right. Dining on his favorite buckwheat noodles, South Korean President Kim Young-Sam shared jokes with 26 of the country's most prominent tycoons during a dinner at the Blue House on July 2. As he schmoozed with the business leaders, Kim appeared to be making progress in persuading them to change the way they do business—and thereby help him revitalize the Korean economy.

The good feeling from the dinner, however, proved illusory. A week later, the Federation of Korean Industries held a high-level meeting to follow up on Kim's message. Only three of Kim's guests from the dinner showed. "This was a clear signal to the President how unhappy we are with his policies," says one participant in the follow-up meeting.

Just six months after taking office with a vow to revitalize the economy, Kim is up against widespread opposition. The leaders of the country's *chaebol*, the conglomerates that dominate the economy, are not supporting him. A recalcitrant legislature and frightened bureaucracy are stonewalling his efforts to promote political reform. And resurgent labor unions are increasing demands for higher wages. Kim, who hoped to have begun turning the country around by now, must confront the likelihood that Korea can muster only meager economic growth this year. For instance, Korea's current-accounts deficit is $1.6 billion for the year thus far.

Kim, the first civilian President in 30 years, rode into office in February as a populist. During the campaign, the former dissident enjoyed the support of many workers convinced that he would reverse decade-old policies of favoring the *chaebol*. Kim has said that he might allow unions to form political parties, and his Labor Minister proposed lifting the bans on payment of wages during strikes and union participation in management.

That message egged on militant labor leaders. Calling for wage increases of as high as 18%, 30,000 workers at a Hyundai Motor Co. plant in Ulsan walked out on July 15. Management prevailed there, as the unions accepted a 4.7% increase and the continuation of the 44-hour workweek. Kim's government has withdrawn some of its labor proposals amid a storm of criticism from *chaebol* leaders.

Trouble is also brewing in the government, where Kim has hit opposi from members of his own Democ Liberal Party. Many are former sup ers of old authoritarian governm and are unwilling to back Kim's ef to eliminate many of the vestiges o military era. Kim has been able to mit only one bill in the National As bly. Members have spent most of session quarreling over corruption i tigations.

In March, Kim bypassed the leg ture with a 100-day program to start the economy by eliminating a 700 administrative regulations. gross national product grew at an a al rate of 4.2% in the second quarter less than the 6% forecast, because decline in *chaebol* investment. Grow not going to pick up "unless there clear change in the government's p ties," says Lee Han-Koo, presiden Daewoo Research Institute. The *cha* want Kim to call off corruption inv gations into their involvement with vious military-backed governme Meanwhile, with the chaos at h *chaebol* executives say they are un to take full advantage of the oppor ties presented by the high Japanese and new markets in China and Viet

MOVING AHEAD. The *chaebol* are ta halfhearted measures to satisfy c upset by the conglomerates' diversi tion into so many fields. Nearly two en groups have announced plans to off companies. But most are minor ations, and a Kim aide dismisses moves as superficial. "We want to fundamental and substantive chang the aide says.

Despite business opposition, pledges to plow ahead with his refo Auditors are stud intragroup transact among *chaebol* affili for violations of trade rules. That c strike at the heart how the indust groups are organi Kim also intends to manufacturing and vice sectors to for investment by 1996.

To succeed, Kim n to balance the dema of *chaebol* and labor also will have to fi way to manage his anticorruption paign while allowing the bureauc and Korea's business establishmen begin functioning again. If Kim do come up with the right recipe, he miss his opportunity to lead a more ocratic Korea into the ranks of adva industrial nations.

By Laxmi Nakarmi in S

PHOTOGRAPH BY KI HO SAEK; CHART BY RAY VELLA/BW

THE NEW OL400e: NO LASER PRINTER MEASURES UP TO OUR FEATURES AND DOWN TO OUR SIZE.

(Diagram not actual size, but you get the idea, it's a small printer.) 12.6"

14.2"

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THE OKIDATA OL400e LED PAGE PRINTER INTRODUCES A NEW FORM OF BUSINESS ECONOMICS. SPEND LESS. GET MORE. Not only is it small, but the OL400e is loaded with features that you'd normally find only in larger, higher-priced laser printers and has *more* features than you'd have to settle for in ordinary inkjet printers.

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THE OL400e BY OKIDATA

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You may have seen the headlines. Merck, the world's largest pharmaceutical company, and Medco, a leader in managing prescription drug programs, will merge in a multi-billion dollar transaction

But this isn't just a Wall Street story. It's important for America. Merck and Medco are creating the first Coordinated Pharmaceutical Care Company because we believe a managed approach to pharmaceutical care can reduce healthcare costs and improve the quality of patient care.

The Problem: A Disconnected Drug Delivery System

Good management of pharmaceutical care can create savings throughout the healthcare system by avoiding costly hospitalization, surgery and lost days at work

Unfortunately, despite the commitment to excellence of all health professionals, America's current system of pharmaceutical care is largely uncoordinated and unmanaged. Many people don't receive the most cost-effective drugs, don't take what they are prescribed–or take too many medicines. The result is billions of wasted dollars and, most important, people who don't get well.

The Solution: Coordinated Pharmaceutical Care

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Merck and Medco: A Promising Prescription

Medco serves more than 33 million Americans and manages more than $4 billion in drug expenditures on behalf of almost 3,000 clients. Merck will bring to Medco a century-long tradition of service to patients, unmatched credibility as a provider of healthcare information, long-standing partnerships with healthcare providers, and world leadership in discovering and developing important new medicines

Merck and Medco will provide the most appropriate and cost-effective medicines–whether they are patented, generic or non-prescription–regardless of which company makes them

The result will be improved quality of life, lower drug therapy costs, and real savings for the healthcare system That's why we believe Coordinated Pharmaceutical Care is the right medicine for America

MERCK

MEDCO CONTAINMENT SERVICES, Inc.

EDITED BY STANLEY REED

IEXICO BRACES FOR THE UNTHINKABLE: FAIR ELECTION

ixty farmers, including a half-dozen ninetysomething veterans of the Mexican Revolution, gathered in a dusty peanut warehouse in rural Xoxocotla. They came to leftist presidential candidate Cuauhtémoc Cárdenas prom- o reverse the 1991 agrarian reform that threatens to allow andowners to buy the small farmers out. "Was it worth it ill blood in Emiliano Zapata's great revolutionary battles, r families' land is unprotected today?" asked sugarcane er Tito Jaramillo Vázquez.

exico's presidential campaign is heating up. Already, a half- n Cabinet ministers are openly jockeying to be tapped by ident Carlos Salinas de Gortari as andidate of the Institutional Revo- nary Party (PRI) in the Aug. 20, vote. The papers are full of stories cartoons handicapping the race. hwhile, an economic slowdown, ris- nemployment, and the possibility the North American Free Trade ement may be shot down by the Congress are giving opposition cians hope that they can challenge RI's 64-year grip on power.

e PRI has dominated through mon- atronage, and fraud, but this cam- promises to be dramatically differ- Under intense pressure from home abroad to make Mexico more democratic, Salinas has pro- l major reforms that could alter the equation of power. If ac- d, the changes, which include an independent tribunal to y election results, would open the door just a crack to the nkable: an opposition victory.

e chances of an upset remain slim. While PRI candidates can storm in a party jet and dominate the airwaves, Cárdenas in a four-wheel-drive vehicle, hopping a commercial flight when necessary. The conservative National Action Party spent just $1.2 million on the 1988 race and will be lucky to $5 million next year. By contrast, the PRI is pushing for a spending ceiling of $206 million—way more than the Democrats or Republicans spent in the last U. S. Presidential election.

Still, election reformers are fast growing in strength. Many Mexicans became outraged after the controversial 1988 vote, when election officials awarded Salinas 50.4% of the vote and refused to allow a recount. The anger was channeled into groups such as the National Accord for Democracy (ACUDE), which has monitored every local and state contest since 1990, forcing the government to cancel the results of three gubernatorial elections. Recently, 20 citizens' groups agreed to team up to monitor the presidential vote with the help of foreign observers.

MINISTERS COLOSIO AND ASPE: JOCKEYING FOR THE PRI'S PRESIDENTIAL NOMINATION

NAFTA FACTOR. The prospect of a tough fight gives the PRI's choice far more importance than in the past. The situation has boosted the fortunes of two PRI stalwarts: the populist Mexico City Mayor Manuel Camacho and Social Development & Environment Secretary Luis Donaldo Colosio. While Camacho has the most appeal among opposition voters, Colosio, a former PRI head, is favored by party regulars who fear Salinas is frittering away their power. Finance Secretary Pedro Aspe remains a contender, but he has hurt his cause with insensitive remarks, such as a recent quip dismissing complaints about unemployment. But if NAFTA falls through, Salinas may anoint Aspe to make sure Mexico sticks to its hard-won economic reforms.

At Cárdenas' rally in the sweltering countryside, the farmers were clearly looking forward to a chance at change. "I don't like what this government has done. It hasn't helped people like me, who fought alongside Zapata to change this country," says 93-year-old Estanislao Tapia. Perhaps this time around the elections will provide an accurate reading of just how many Mexicans feel the same way.

By Geri Smith in Xoxocotla, Mexico

BAL WRAPUP

YO: NO QUICK FIX

ough there's much talk of re- viving the stalled Japanese nomy, Prime Minister Morihiro okawa's new Cabinet seems un- ly to push through a major stim- package this year. New Finance ister Hirohisa Fujii says he is sidering tax incentives for hous- and corporate investments and push for more spending on pub- works. But he rules out the big —income-tax cuts—anytime soon, ite campaign promises by sever- f the new coalition government's ies to enact them. Powerful bu- icrats in the Finance Ministry strongly oppose tax cuts in the face of dwindling government revenues.

RUSSIA-TURKEY OIL SPAT

Angered at being cut out of potentially lucrative fees from oil export pipelines from the former Soviet republics, Turkey is threatening to curtail oil shipping through the Bosporus. The Turks say they are concerned about shipping congestion and environmental damage in the bottleneck between the Black Sea and the Mediterranean. But they also want to force international oil companies, including Chevron and Amoco, to send some oil from their huge upcoming projects in Azerbaijan and Kazakhstan through a proposed pipeline that would pass through Turkey.

GLAXO PATENT SUIT

A case crucial to the future of the big British drugmaker Glaxo is beginning in North Carolina. Glaxo is suing to stop Canadian generics maker Novopharm Ltd. from introducing a knockoff of Glaxo's antiulcer drug Zantac to the U. S. in 1995. Novopharm contends that Glaxo should lose patent protection then, not in 2002 as scheduled. If Glaxo loses, generics could grab the lion's share of the market—devastating Glaxo, which gets 60% of its profits from Zantac.

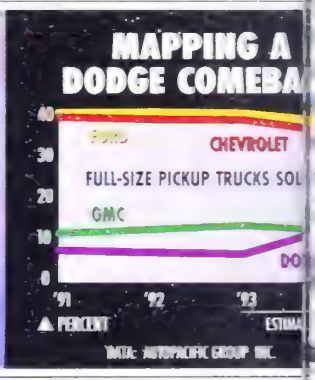
PHOTOGRAPHS BY SERGIO DORANTES/SYGMA

THIS RAM CAN GO HEAD TO HEAD WITH ANYONE

Chrysler's flashy new truck may set off a competitive brawl

Last January, when Dodge's all-new Ram pickup was lowered from a convention center ceiling to its world debut at Detroit's annual auto show, the most anxious observers were from archrival Ford Motor Co. The Ram, with its roomy cab, radical styling, driver air bag, and optional V-10 engine, was clearly a serious challenger to Ford's F-series truck—for 11 straight years the best-selling vehicle in the U. S. Soon after the Ram hit the floor, Ford engineers furiously began measuring and taking notes on Chrysler's first full makeover of its truck since 1971.

Their verdict: Once Chrysler Corp.'s model reaches showrooms next month, it will spark the biggest brawl in years in the $22 billion full-size pickup market. "We're not going to let anybody come play in our business without a pretty good fight," warns Ross Roberts, Ford



Div. general manager. Still, analysts figure that Ford, as well as General Motors Corp.'s Chevrolet and GMC Truck divisions, will lose ground to Chrysler, which now holds just 7% of the market.

SHIFTING GEARS. The reason there's a tussle is that full-size pickups have long been among Detroit's best money-makers, in part because heavy-duty tariffs tend to keep out foreign rivals. Gross profits top $5,000 for fully equipped versions, and per-vehicle profits are growing as more individuals buy trucks with creature comforts for family use. This is part of a broader consumer shift from cars to trucks, which has helped boost large pickup sales 10% so far this year.

Even competitors agree that Chrysler may have a hit. "It's a very nice truck," concedes Ford's Roberts. Chrysler spent $1.2 billion over three years to develop the Ram, using the same team approach that spawned the successful LH midsize sedans in 1992. To make the truck stand out, Chrysler designers gave it a bold grill and prominent front fenders akin to some of today's long-haul rigs. They made the cab four inches longer than competitors' for extra comfort and storage. And to smooth the ride, they adapted the front suspension from Chrysler's popular Jeep Grand Cherokee.

Still, the Ram has its work cut out. Its $11,800 base price merely matches the competition. And an extended-cab version—crucial to boosting sales among family buyers—won't be out until June, 1994. Competitors, meanwhile, are hitting back. Ford engineers scrambled to put an air bag in some 1994 F-series models and spiffed up their truck's interior as well. Chevy's C/K model won't get an air bag until the 1995 model year. But GM's largest unit plans a big fall campaign to educate salespeople about countering the new competitor.

Moreover, Chrysler must dislodge some of America's most loyal vehicle buyers. "If you're a Ford owner, it's damn near impossible to get you into a Chevy, and vice versa," says analyst Maryann Keller of Furman Selz Inc. As a latecomer, Chrysler will have an even tougher time. Buyers who use them for work still purchase more than 60% of full-size pickups, and they're typic more impressed by proven reliab than by swoopy design. Concedes nard Robertson, Chrysler's vice-pr dent for truck engineering: "We're g to have to earn every sale we get."

Chrysler's first chore will be to truck shoppers' attention. Startin September, the company and its ers will spend more than $40 millio an advertising blitz. First, the Ram appear on 650 billboards in major tr buying areas, such as Texas, Califor and the Rocky Mountain states. T comes a direct-mail pitch to 3.6 mi pickup owners, as well as TV ads magazine and newspaper inserts fea ing a color poster of the truck. Ad that a $10 million campaign to edu Dodge salespeople about how the stacks up.

NICE SLICE. Nobody expects Chrysle overtake Ford and Chevy. Still, in 1 the leaders will each cede nearly th points of market share, to 38.4% 36.3%, respectively, predicts Christo W. Cedergren, a forecaster at AutoP ic Group Inc. in Santa Ana, Calif. whose models are virtually identical Chevy's, could lose more than a p Meanwhile, the Ram's fresh look beefy engines—besides the standard there are several V-8s and the V- should boost Chrysler's share to 14%, says Cedergren. That increas market share could bring $1.5 billio new sales and hundreds of million added profits.

Over the long haul, the pickup will intensify. Ford plans to make the F-series for the 1996 model y and GM will follow suit with the C/K years later. Analysts expect Toyota tor Corp. to ease into the full-size pic market by mid-decade with an upgra V-8 version of its midsize T100. Cle hotter competition heralds tighter gins and shorter product cycles, a already has in compact pickups. W means that Chrysler can't wait anot 22 years to update the Ram again.

By David Woodruff in Det

How to make more of your most valuable asset.

Now Just $55 per Client and $595 per Server!

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ur time. You can schedule
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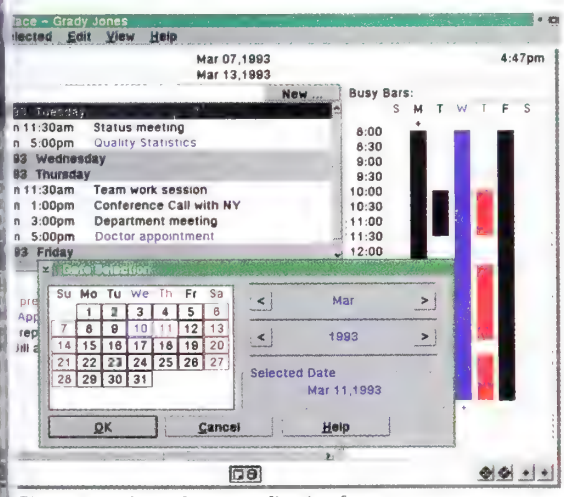

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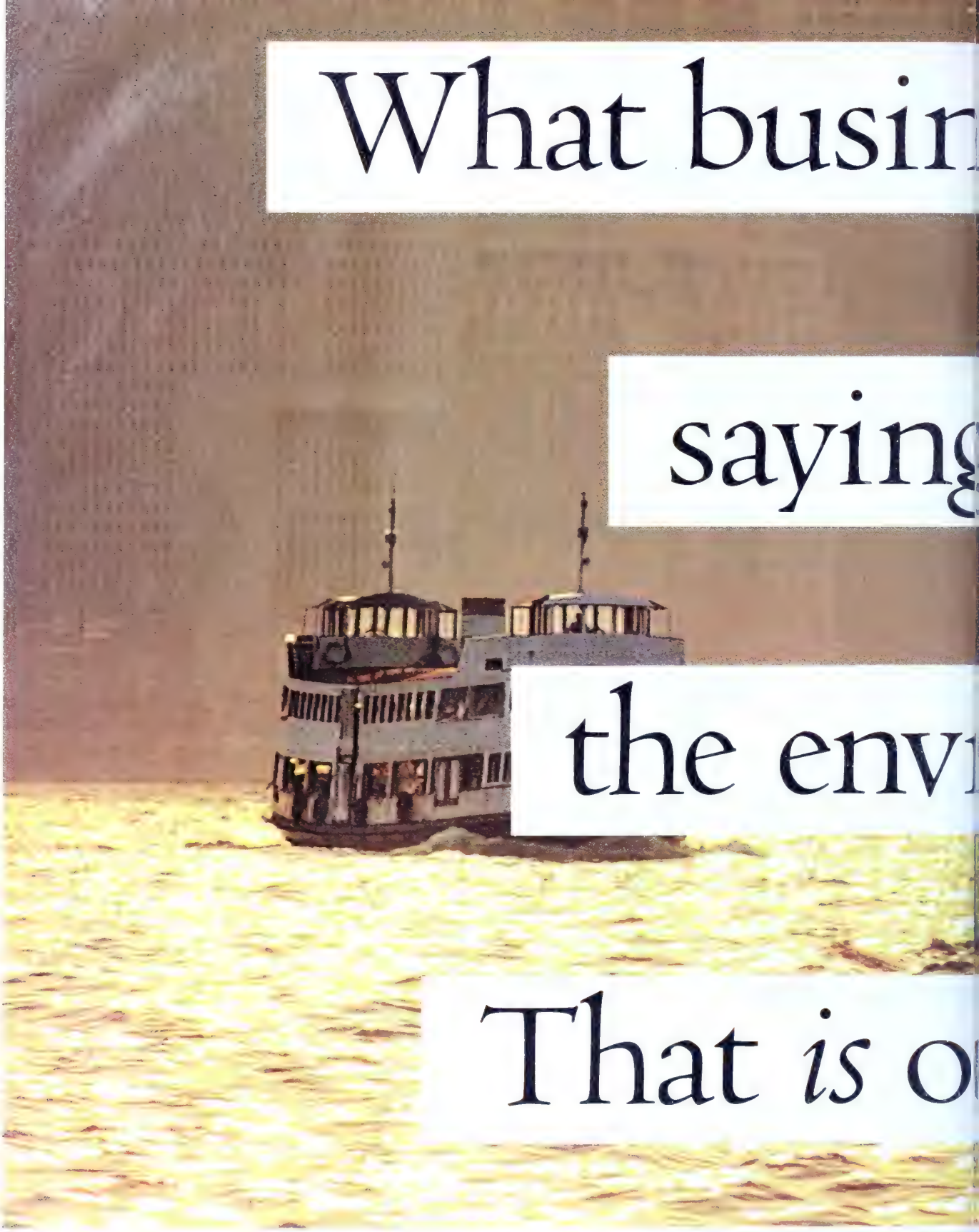

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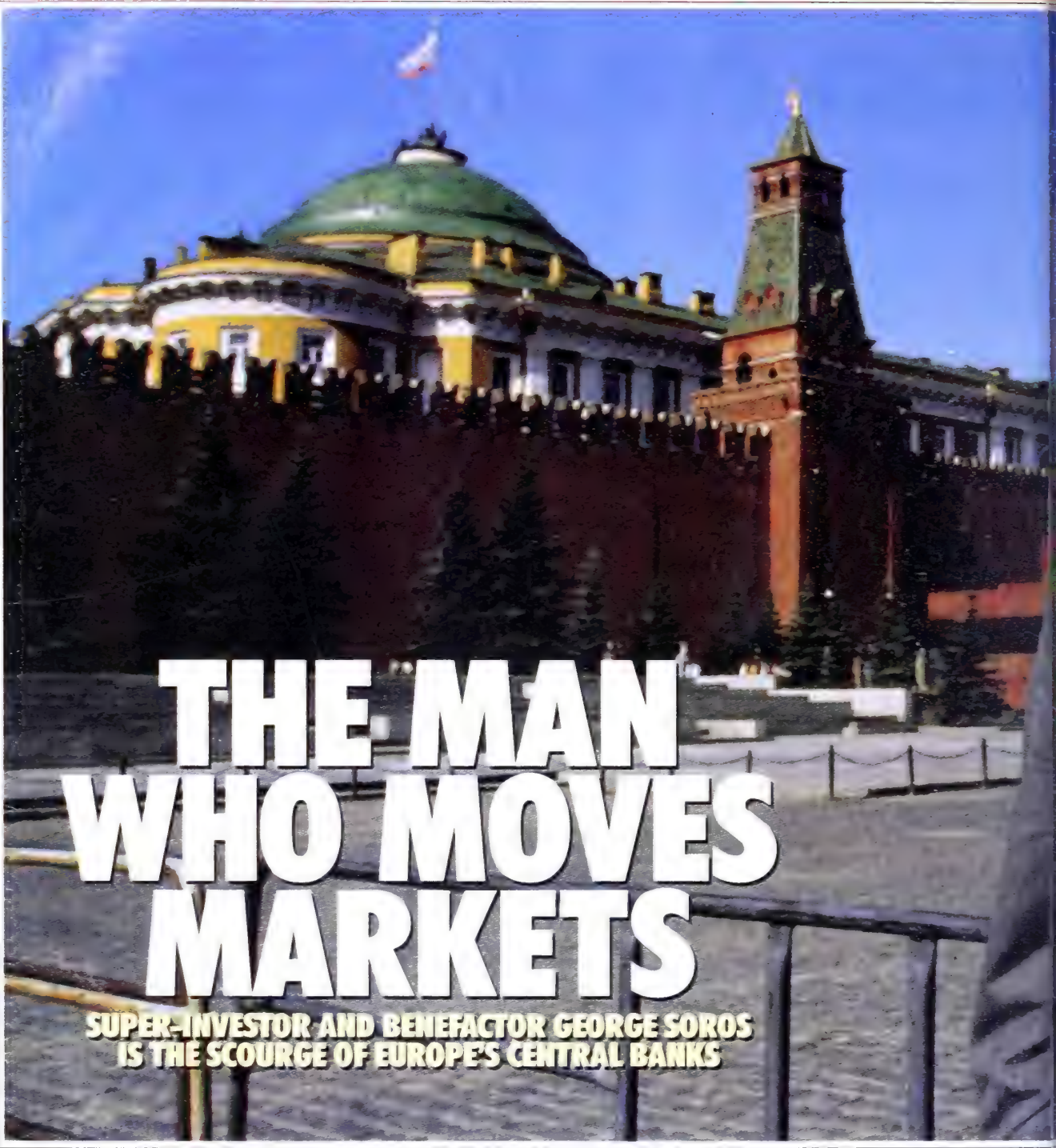


THE MAN WHO MOVES MARKETS

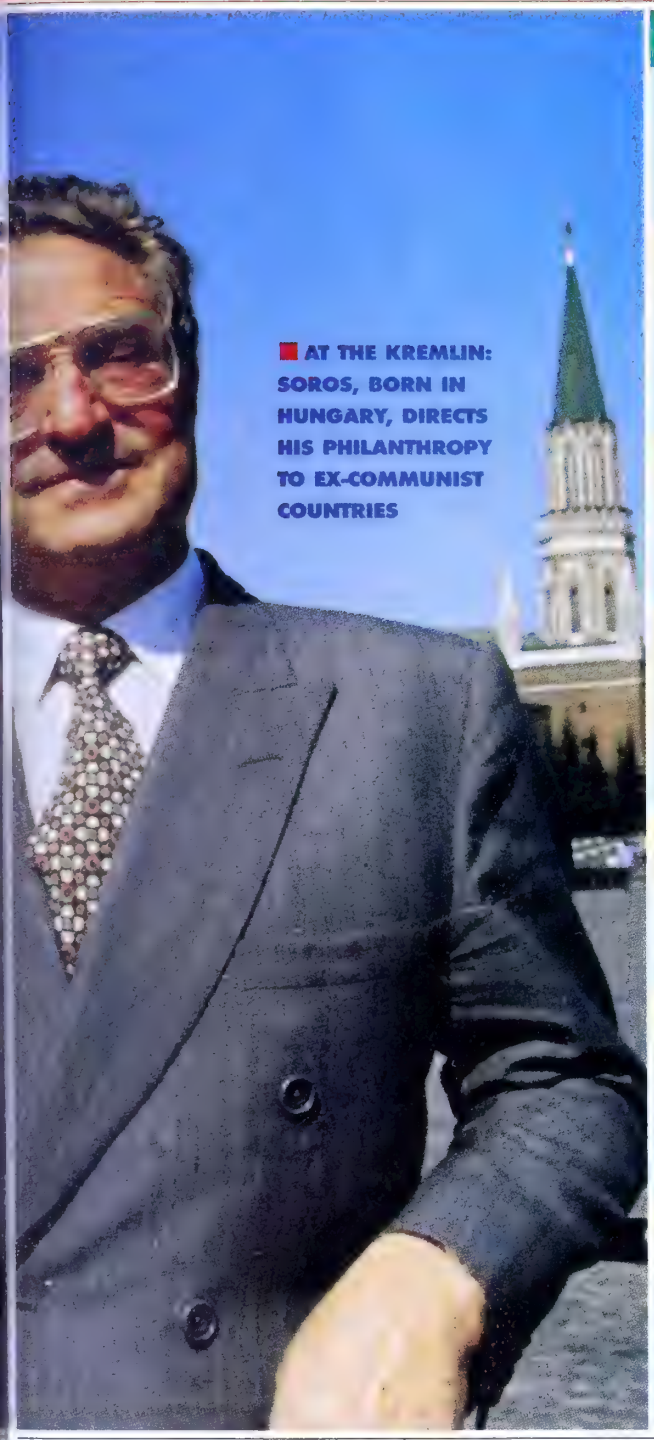
SUPER-INVESTOR AND BENEFACTOR GEORGE SOROS IS THE SCOURGE OF EUROPE'S CENTRAL BANKS

There is a [illegible] can be damaging, and one of the flaws in my character, which I have not fully fathomed, is the urge to reveal myself.
—George Soros, *The Alchemy of Finance*, 1987

It is a hot day in New York, and something unusual is about to happen on the 33rd floor of a building at the corner of 57th Street and Seventh Avenue. These are the offices of George Soros, the most powerful and successful investor in the world, a man whose actions and utterances can rock world financial markets, infuriating central bankers and playing a major role in derailing the European currency system.

George Soros is about to give an interview. And Gerard Manolovici, a veteran Soros portfolio manager, is upset. "Gary, you've got to stop it," he says to Gary Gladstein, Soros' chief administrator. "I'm serious. You've got to stop this story."

Gladstein smiles. "We don't like publicity around here," he explains to a [illegible] porter. "We like to keep a low profi[illegible] But if the Soros investment manag[illegible] are loath to reveal themselves to [illegible] world, that sentiment is not—nowaday[illegible] shared by their complex, billionaire ov[illegible] lord. For the better part of a year, So[illegible] has been regularly making his vie[illegible] known to the world—but only rar[illegible] through interviews such as his talk w[illegible] BUSINESS WEEK (page 52). He prefers [illegible] avoid the media middleman—the Am[illegible] can press in particular. Instead, he co[illegible]



AT THE KREMLIN: SOROS, BORN IN HUNGARY, DIRECTS HIS PHILANTHROPY TO EX-COMMUNIST COUNTRIES

SOROS' FINANCIAL EMPIRE

SOROS FUND MANAGEMENT

This firm is the nerve center of his financial empire. Based in New York and owned entirely by Soros, its 14 managers run the Soros investment vehicles:

QUANTUM FUND

Soros' flagship, with $4.2 billion in net assets. Invests in currencies and U.S., European, and Asian stocks. Like all Soros funds, Quantum is free to take short positions. Gained 68.6% in 1992; average annual return of 35% since its creation in 1969. Year-to-date performance: 45%.

QUASAR INTERNATIONAL FUND

Founded in 1991, is primarily run by 15 outside managers, with currency trading managed by Soros. Has about $1.6 billion in net assets; gained 55.7% in 1992. Year-to-date performance: 41%.

QUANTUM EMERGING GROWTH FUND

Started in 1992, it concentrates on emerging stock markets in Latin America and Asia but can invest in the U.S. and Europe and in currencies and bonds as well as stocks. Net assets total $1.1 billion. Gained 57% in 1992 and 51% year to date.

QUOTA FUND

Founded in 1992, this is a "fund of funds" whose investments are handled by 10 outside managers. Has about $700 million in net assets. It gained 36.7% in 1992 and 72% year to date.

QUANTUM REALTY TRUST

Started in February, 1993, in association with Paul Reichmann. With $655 million in net assets, it will be investing mainly in office buildings, though it can buy shopping centers and residential properties or even engage in real estate development.

G. SOROS REALTY

Established in June, 1992, it controls an Argentinian real estate company and in December purchased a $350 million portfolio of commercial mortgage loans from the Resolution Trust Corp.

DATA: SOROS FUND MANAGEMENT

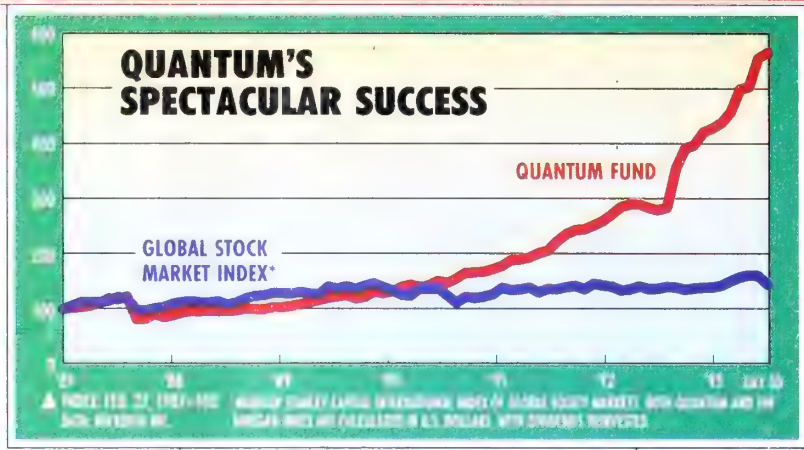
cates his views directly—by arti- in newspapers, statements to wire ces, and letters to the editor, all en in a distinctive style that com- courtliness, scholarship, and, at s, a touch of condescension.

IG HIGH. Soros' public statements made central bankers cringe—par- arly in Europe, where exchange- mechanisms force them onto the sing side of Soros' trades, and e, more often than not, they wind s losers. Soros' latest pronouncement, made on German TV, was reported to the world on Aug. 4: He is selling the mark and buying dollars. And sure enough, as if by magic, the mark declines, the dollar rises.

When Soros disclosed his 14% stake in Newmont Mining Corp. in late April, investors bought Newmont stock, other mining stocks climbed, and bullion bounced. And the world of global real estate is now agog over his partnership with the fallen real estate giant Paul Reichmann of Olympia & York Developments Ltd. Soros and Reichmann are jointly embarking on $1.5 billion in commercial projects in Mexico City and are exploring other ventures that could help bring commercial real estate out of its prolonged depression. But in the interview, Soros was conspicuously untalkative about gold and real estate—and he sternly denied speculation he is betting on a revival of global inflation.

Soros is riding high. He has apparently managed to sidestep the only major threat to his stature in recent

years—the Treasury-auction scandal at Salomon Brothers Inc. Soros and his management firm have been named in a class action suit as participating in the scandal, but they have never been cleared—or charged—by federal authorities. But Gladstein, in the firm's first public comment on Salomon, says that the Soros organization has been assured it is not a target of any federal investigation. Gladstein says the Soros people do not intend to settle the litigation and "hope" that they will be dropped from the suit.



INTELLECTUAL GAME. Soros is more than just an ultrarich global investor. He has also underwritten a philanthropic empire that makes him the single most influential private citizen between the Rhine and the Urals (table, page 58). Soros is an outspoken opponent of rampaging nationalism and a defender of democracy and free enterprise. His views seem routine until you consider that he is putting his money behind them, in one of the most significant private-relief efforts in this century.

In Eastern Europe and the former Soviet republics, Soros' foundations have given $300 million to a broad range of educational and social-reform causes. It is more than just charity. "He invests his philanthropic money," observes Jeffrey Sachs, a Harvard University economist and adviser to the Russian and Polish governments on economic reform. It is an intensive effort to mold a generation of Eastern European leaders.

Soros has more money now, he acknowledges, than he can possibly spend. But as he puts it, "The more money I make, the more money I can give away." Money-making for Soros now is an intellectual enterprise more than anything else—an exercise in "reflexivity," his complex theory of investing.

Contrarianism combined with an analysis of economic cycles and market psychology have been
underpinnings of So
investment style c
the years. In 1985,
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huge killing on
much-out-of-favor yen. In October, 1
he predicted a crash—in the Japan
market, not the U. S. He still manag
however, to reap a 14% gain in '87, w
most investors took a bath. His Ja
nese prediction ultimately paid off, w
that market began to tank in late 1
His audacious bet against the Bri
pound last year stemmed from his sa
reading of Britain's economic mal
and a belief that, despite strong st
ments to the contrary, Britain w
abandon the European exchange-r
setup rather than continually def
the pound through repeated and ex
sive interventions in the curre
markets.

Since 1969, when it was establish
his flagship investment vehicle,

'I'M AMUSED BY MY GURU STATUS'

In a rare interview, George Soros met at his New York offices with Markets & Investments Editor Gary Weiss. Here are some excerpts from the interview:

Q *Your public statements surface at unpredictable intervals, sometimes as almost a bolt out of the blue. What is the rationale behind the timing of your public statements?*

A I generally don't want to have a public presence unless I have something to say.... And to the extent that it is possible, I prefer to say it in my own words. Because that is one definite policy that I'm developing—I find that if I give an interview, I will be quoted out of context. Even though they are my own words, the slant is different than what I intended....

Even though I express myself, I also want to remain myself and not become dependent on the media. You see? And that is also why I don't want to have a media policy, a strategy as to how to get my ideas across, because then it begins to dominate your thinking....

I don't have a love-hate relationship [with the media]. If anything, I [keep] a really wide distance. If you now write a devastating critique and find some flaws or something in me...it won't hurt me. So you are at liberty

Q *Do you have a perception as t
tent in which your statements an
move markets?*

A It's clear it has become an in
factor. Now, I also know, you
people are basically misguided
view of my infallibility, becaus
don't mind to stress this—if a
I make as many mistakes as
guy. But where I do think tha
is in recognizing my mistak
see. And that is the secret to
cess.... The key insight tha
reached is recognition of the
fallibility of human thought. T
book [*Alchemy of Finance*]
that. So it naturally applies t

I'm amused by my guru s
acknowledge it. How can I d
think it is a passing phase.
that actually, to the extent tha
an impact on people's thinking
they'll learn how important

PHOTOGRAPHS BY ROBERT NUNNELLY; CHART BY ALBERTO MENA/BW

OROS DENIES 'S STILL ACTIVE MANAGING NDS—YET HE IS NSULTED BEFORE MAJOR TRADES

antum Fund, has lized an unparled 35% annual re- n. No other inves- has produced ter results for such ng period—not Pe- Lynch, not War- E. Buffett. Quan- has had its ables, such as the decline in 1981, only down year. unlike, say, the gellan Fund in the ich era, Quantum not enjoy its best rs at an early age, le it was still small nimble. Quantum a class by itself the investment ld: It can leap like a gazelle even ugh it has reached elephantine size.

THE MARK. In 1992, Quantum began year at $3.1 billion. By yearend, it rocketed a staggering 68.6%, with h of that paid out to investors in or shares of a new realty fund. se payouts kept the fund from ballooning, but it was still an immense $3.7 billion at the end of 1992. Even so, Quantum has gained an additional 45% so far this year, mainly because of Soros' currency speculations.

It was the $1 billion coup in the pound that turned Soros into a global investment superstar. He was the man who "broke the Bank of England," as Fleet Street dubbed him. And that is only a mild overstatement—for he did indeed nudge Britain out of the European exchange-rate mechanism last September. "Black Wednesday—or White Wednesday, as some of us call it," is how Soros puts it. More recently, in

the flaws and to think critically. t is what I have been trying to n my books.

hat has happened, for instance, rrency markets is a wonderful . Because it's amazing how the n] authorities are unable to ad- mistakes and how they are unhange their way of thinking.

your view of the European cur- sis?

y reminiscent of what happened he interwar period, between ar I and World War II, and it's mazing how people haven't from past experience. It's as if ynard] Keynes had never lived. the same mistakes: overvalued es, sticking to monetary disci- a time of recession, you know, h real interest rates. It's a tragon.

has to be some new thinking. etary system is still intact, but ange-rate mechanism is definite- , so you need to fix the mecha- u need a system. That's my po- nd I think when you fix the mechanism, the strong currency has to take more responsibility than in the present. The arrangement in the ERM was tilted against the weak currencies. The weak currencies had to take all the burden of adjustment. And what destroyed the system is that the strong currency, the German mark, had the adjustment problem but was under no obligation to do anything about it.

Q *Some observers surmise that your involvement in Newmont Mining Corp. and real estate implies that you are betting on a revival of global inflation.*

A They are wrong. They are wrong! In each case, there's an individual reason, but there's not a unifying theme. If anything, I think that the deflationary forces are much greater than the inflationary forces. I think that there are opportunities in real estate. There have always been opportunities in real estate, so there's nothing new about that. What is new is that I had an opportunity to associate myself with a real estate investor who has been extremely successful, probably as outstanding in his field as I am in mine. That's the opportunity I went after.... The timing was that Paul Reichmann was available.

> People are "misguided in their view of my infallibility," says Soros. "If anything, I make as many mistakes as the next guy."

Q *Are you calling a turn in the real estate market?*

A I have not said it, and I'm not going to say it.

Q *Would we be wrong if we said it?*

A I wouldn't say that either [laughing].... I have no contribution to make on this subject.

Q *What about gold?*

A The same thing.

Q *Those are two of the subjects that interest our readers the most.*

A [Laughing] I'm sorry about that.

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June, Soros wrote a letter to *The Times* of London stating strongly that the mark would decline, and explaining why: The German central bank, he felt, had kept interest rates high for too long. The Bundesbank, he argued, would have no choice but to reduce short-term rates sharply. Soros backed up his comments, as usual, with cash—by shorting the mark. In June, his Quantum Fund climbed 10%—a gain of some $400 million, no doubt stemming from his currency trading.

Soros insists he did not sell francs after his latest round of public pronouncements. First, he said in *Le Figaro* on July 26 that he would not short the franc because he did not want to be blamed for derailing the exchange-rate mechanism. But then, the Bundesbank decided not to lower the discount rate—contrary to Soros' admonition—and so Soros dashed off a statement on July 30, saying that he now felt free "to resume trading in the French franc." He said: "It is futile to attempt to protect the European Monetary System by abstaining from trading in currencies when the anchor of the system, the Bundesbank, acts without regard to the interests of the other members."

ELDER STATESMAN. Why the jawboning? Soros' inconsistent—some might say capricious—attitude toward public statements exasperates his critics, particularly the central bankers and other currency traders who lose when comments by Soros move the markets against them. In his BUSINESS WEEK interview, Soros reflects on his stance toward publicity. When the sentence in his 1987 book, *The Alchemy of Finance*, about the "character flaw" of self-revelation is read to him, Soros' face breaks into a broad grin. "It's something that troubles me. I try to find the right balance," he explains, adding: "I'm no longer actively involved in the running of the fund."

That has been Soros' longtime position—that he is an elder statesman of investing, disconnected from the operations of his fund. And it's true that Soros leaves the day-to-day management, such as routine stock-picking, to a New York staff of 14 investment pros, headed by Gladstein and including such luminaries as Manolovici, an authority on emerging markets; Stanley Druckenmiller, Soros' No. 1 global market strategist; and Evan Marks, a 35-year-old former real estate ace at Wasserstein, Perella Group Inc., who is spearheading Soros' foray into global real estate.

But Soros is still very much Quantum's CEO. He keeps in daily contact with the fund and is consulted, Gladstein acknowledges, before every major trade. "He's always reachable," says Gladstein. And no wonder: Soros Fund Management, which operates Quantum and its four other investment vehicles, is organized not as a corporation or even a partnership. It is a sole proprietorship, 100% owned by Soros.

To understand Quantum, you must dig into Soros' past—particularly his crucial experiences in the Holocaust. Soros says so himself in *Alchemy*. Under his father's tutelage, "the Second World War served as an advanced course at a tender age," says Soros in the book. "As the reader shall see, the investment vehicle I created a quarter of a century later"—Quantum—"drew heavily on skills learned as an adolescent." But the reader does not see. Nowhere in this book, or in any of his other writings, does Soros relate his experiences as an lescent in any meaningful detail. key to his fund—and his life—is art of survival.

Soros was born to an upper-i dle-class Jewish family in Buda in 1930. His father was a law For Tivadar Soros, survival second nature. As an Austro-H garian prisoner during World W the elder Soros had survived C ist brutality by escaping, and managed to survive in Russia du its most turbulent era—from Russian Revolution in 1917 thro 1920, when the country was in throes of civil war. "This was a mative experience for him. Tha what shaped him—and he sha me," says Soros. "So when the mans came in, he was mentally ter prepared than most others the turmoil."

For Hungarian Jews, 1944 w fateful year. Hungary had been only major Jewish communi 1 million people—under Nazi d nation not yet decimated by the ocaust. Then, some 400,000 peris even though word had begun t ter out of Auschwitz that mass terminations were under way. ros and his entire family w among the fortunate.

BLOTTED OUT. It is a horrendous which Soros discusses with great re tance. His father, he says, paid for S to pose, using false identity papers the godson of an official of the Hun ian Agriculture Ministry responsible confiscation of Jewish properties. official had a Jewish wife, whose hi was also financed by Soros' father commercial transaction," is how S describes it. But it was one that for him to travel with the official aro Hungary, as the official confiscated property of owners who had been tr ported to Auschwitz. At one point recalls, he personally delivered notice prospective deportees who were tined for the gas chambers. He war them. Not all believed him. "One said: 'I have always been law-abid They can't hurt me.'"

Like other survivors of that era, ros has blotted out the emotions were so real to him half a century He tells this tale in an offhand, une tional manner. "It was a nice adv ture," he says sarcastically of his experiences.

The Soros family was reunited Hungary after World War II. Fea the prospect of life under a commu regime, Soros made his way to Lon in 1947. It was his loneliness and po ty there, and not the double life he

THE QUANTUM FUND—A SNAPSHOT

The following is a breakdown of the Quantum Fund as of Mar. 31, 1993.

	Long positions	Short positions
	Millions of dollars	
STOCKS		
U.S.	1,298.8	987.3
EUROPE	847.0	61.0
ASIA	1,221.1	—
LATIN AMERICA	82.6	—
STOCK INDEXES*		
U.S.	—	1,064.2
EUROPE	35.4	—
ASIA	820.2	—
FIXED INCOME		
U.S. GOV'T-RELATED	2,213.0	309.9
U.S. OTHER	825.6	3.8
EUROPE	6,397.4	—
ASIA	947.5	—
LATIN AMERICA	70.1	—
COMMODITIES		
METALS	127.9	—

*Net dollar value of futures and options contracts

DATA: QUANTUM FUND

As a teenager, Soros survived the Holocaust by posing as the godson of a Hungarian official

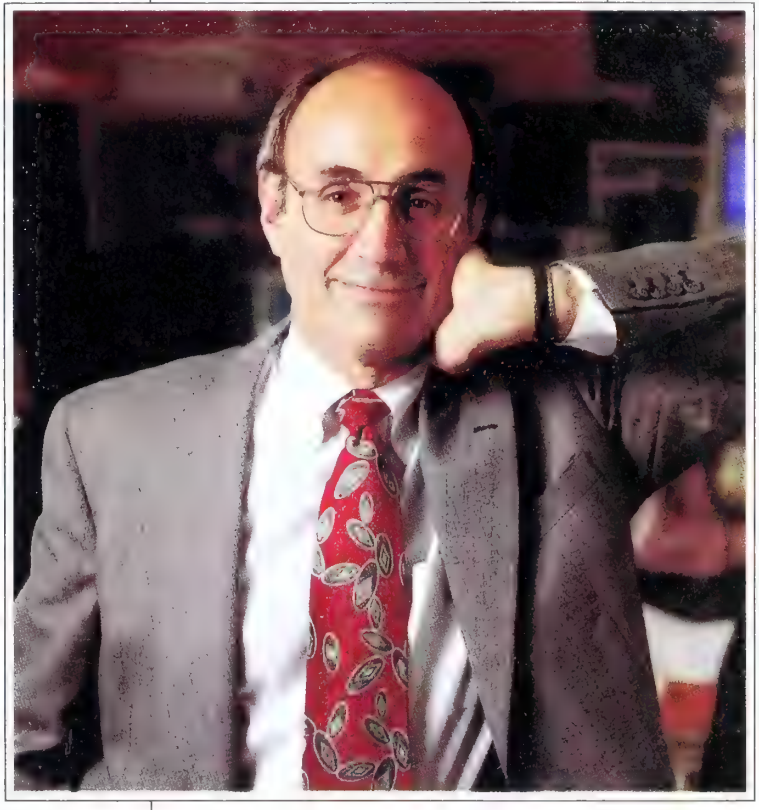
)44, that he describes as "the most ult time of my life." Postwar Britain spartan, and longtime Soros asso- Nils O. Taube recalls that Soros orted himself at the time as a wait- Quaglino's, where rich Londoners l and danced until the early morn- ours. There he was reduced to eat- eftover profiteroles when he didn't enough money to buy a meal.

ros graduated from the London ol of Economics in 1952, but the diploma proved of little immediate . He was slogging away as a sales- of handbags and jewelry in Black- a blue-collar seaside resort, when rote a letter to every investment in London. That landed him a job trainee at the British tment bank Singer & llander. It was a , of sorts—for Singer iedlander had a thriv- ock market operation fascinated Soros. LSE taught him nothing the markets, "and I y knew they existed," Soros. His general ections of Britain are than nostalgic. "I make much of a ca- in England," he re- sourly.

rough a friend, Soros ned a job as an arbi- trader at F. M. May- New York in 1956. ose days, arbitrage a far more humdrum of trading than it is days. Traders bought sold identical secur- in different markets ce advantage of tiny discrepancies. Soros d on to Wertheim & n 1959 and then to old & S. Bleichroeder, l Dresden family banking firm. At d this time, he began raising a y—he has five children, including ons from his second marriage. The brood has received little publicity, oros likes it that way, although he s proud of the acclaim received by ife, Susan, who recently founded a ate program in decorative arts in York.

ONOUNCEABLE. In the 1960s, Soros e adept at arbitrage between the York and London markets. It was eginning of a pattern that was the ark of his career, to dive in where s were too timid or lacking in ledge. Recalls Edgar Astaire, a on stockbroker who has worked Soros since 1960: "The two worlds interweave much. American bro- vere very insular. They sold American stocks and couldn't pronounce the names of foreign company stocks, so they didn't bother with them." But Soros was different. He knew the markets, and Astaire says "he soon realized he could go out on his own managing money for others." That was 1969, when he made his first ventures into the two activities that were to dominate his life—reform in Eastern Europe and money management.

He formed the Quantum Fund early that year with his partner at the time, James Rogers. It was then, as now, an offshore fund, based in Curaçao and off limits to U. S. citizens or residents. Soros has never sponsored a U. S. investment vehicle, even though his operations are based in New York. Offshore funds are exempt from U. S. regulation. Thus they can be as adventurous in their investing as the private hedge-fund limited partnerships that operate in the U. S. But the offshore funds can grow to any size, whereas hedge funds are limited by U. S. law to 99 investors and usually require a minimum investment of at least $1 million.



GLADSTEIN SAYS THAT SOROS' FIRM IS NOT A TARGET IN THE SALOMON TREASURY-AUCTION INVESTIGATION

Quantum, by contrast, is freely available to non-U. S. investors for as little as $29,716—the cost of one share on Aug. 6. But selling the same share would net an investor only $28,855. Quantum and its sister funds are organized much like ordinary mutual funds, but with a crucial difference: The funds are bought and sold at a huge premium over net asset value, which was $21,533.59 per share as of Aug. 6. The fund administrators periodically adjust the premium, based on their assessment of market conditions, and it is now 38% for buyers and 34% for sellers. The premium is designed to discourage trading in the fund—and is unique in the world of offshore funds, according to Antoine Bernheim, who publishes the *U.S. Offshore Funds Directory*.

MORE THAN ENOUGH. Soros' philanthropy is far more conventionally organized. His largess began in earnest in 1969, when he established the George Soros Charitable Trust. In 1969, it paid out $7,080 and hauled in $10 in gross income, according to a handwritten annual report filed a couple of years later with the New York State Attorney General's office. The four recipients were the United Methodist Church, a nursery school, the Encampment for Citizenship, and the International Rescue Committee.

It was more than just anticommunism that drove Soros. As a student of philosopher Karl Popper at LSE, Soros developed ideas about political systems, society, and human behavior that would engross him for the rest of his life. Popper described both fascism and communism as "closed societies" that were doomed to failure.

By the early 1980s, Quantum had grown to more than $300 million, and Soros was firmly established on Wall Street. Now, he turned his attention to undermining the communist regime in Hungary. In 1982, Soros persuaded the International Monetary Fund to withhold a loan from Hungary until the government issued passports to half a dozen leading intellectuals and dissidents whom he wanted to meet with in New York. The scheme worked.

Since closed political systems are inherently unstable, Soros reasoned that he could generate a major change by exerting just a little force. "Soros constantly chooses those points where he can influence historical events with his limited power. By choosing carefully where and how to step in, he can gain maximum impact. It's like the stock exchange and knowing at what time to intervene," says Tibor Vámos, a longtime friend of Soros who is now the

head of the Computer & Automation Institute at the Hungarian Academy of Sciences.

Soros won his first big bet in Hungary. Communist officials in János Kádar's government hoped to take advantage of Soros' millions to bolster scientific research and thereby stifle growing discontent among intellectuals. Instead, the foundation's activities had the opposite effect. Says János Quittner, a manager of the Soros Foundation in Budapest: "The communists wanted to use him. After a short time, it was clear they could not."

Instead, academics who studied abroad under Soros Foundation scholarships came back promoting "radical" Western ideas about democracy and market economy. Language teachers sent to the U. S. to teach Russian for one year at high school came back as qualified English teachers.

One of Soros' cleverest ploys was giving hundreds of photocopiers to Hungarian libraries through the foundation in the mid-1980s. Up to that time, copying machines had been monitored by secret-service agents to prevent their use by the underground press. Soros proposed donating the machines in 1985 under the condition that they not be controlled. The government was eager to accept, because it couldn't afford to buy them with its ever-shrinking reserves of hard currency. Vámos recalls: "After that, the secret service stopped patrolling all copy machines.... It helped the underground press tremendously."

SEED MONEY. Soros Foundation funding for students and professors at Hungarian universities also helped give rise to a group of young political activists who later went on to found one of Hungary's strongest new political parties—Fidesz. The foundation was the only institution in the country whose decisions were not tied to one's political affiliation or behavior. Moreover, it was run by a former enemy of the state. As a condition for providing seed money, Soros demanded that the foundation be run by Miklós Vasarhelyi, a dissident who had been jailed for five years.

Soros' presence in Eastern Europe took on an added dimension in 1990, when he founded the Central European University (CEU). With campuses in both Prague and Budapest, it is in its third year of operation and has 400 students from 22 countries. Soros keeps a watchful eye on the university. Traveling without a chauffeur, secretary, staff, or bodyguard, he often hails his own cabs, walks across town, or takes the streetcar. His lifestyle in the West is more typical for a billionaire, with homes in London and New York and a sprawling house in Southampton, Long Island, where he frequently entertains guests from Eastern Europe and the field of economics.

Soros' presence in the former Soviet republics is growing steadily. In the Baltic states, his money is being applied to promote the growth of Western ideals—including free enterprise. In 1990, Soros organized an Open Estonia Foundation and similar foundations in Latvia and Lithuania, which provide business and management training, travel grants to scholars, scholarships, and English-language training. In Ukr Soros sponsors a Counc Advisers comprising Wes ers posted to various gov ment departments. One adviser, Ukrainian-Ame venture capitalist George chyshyn, was instrument establishing a Ukrainian tral bank. On a national l a Soros foundation is han out grants to research s tists in the former Soviet ion, and it plans to ste troublesome brain drai giving scientists $100 mi over the next two years.

Soros' crusade in sup of liberal Western ideals aroused spasmodic spurt local hostility. He has stung personally by the surgence of nationalisn Hungary. Right-wing p cians, including former m bers of the ruling Hunga Democratic Forum, atta him bitterly in 1992, clai he was part of an interna al conspiracy of Jews and ers seeking to underm Hungarian nationalism. also routinely accused of ing to profit from his ph thropic activities, althoug sold his initial investmen the First Hungary Fund to avoid any conflict betw his investment and ph thropic activities.

VULTURE FUND. The Eas European connection pr to have an unintended be for Soros, which is only beginning to be rea Through his acquaintance with ano Hungarian-born philanthropist, Al Reichmann, Soros got to know Alb brother Paul, the chieftain of the O pia & York real estate barony. That tuitous" connection, as Soros put resulted in a real estate partner with Paul Reichmann that starte February. Quantum Realty Partner in industry parlance, a "vulture f aimed at gobbling up distressed pro ties. It's similar to the one that wa ganized by real estate magnate Sa Zell. Hedge-fund manager Michael S hardt has also organized a vulture that, according to people familiar the fund, has raised upwards of million.

Real estate professionals are dub of such ventures. "There's too many lars chasing too few deals. The prob is that the insurance companies see light at the end of the tunnel, and

SOROS' PHILANTHROPIC DRIVE

Soros-funded foundations operate in 22 countries, including 19 former communist nations. Here are some of the principal recipients:

SOROS FOUNDATION–HUNGARY

Est. 1984. Soros' first overseas foundation. Initially, distributed books and copying machines, and financed dissident student groups. Today, provides $6 million annually for cultural and educational activities.

FOUNDATIONS IN FORMER SOVIET REPUBLICS

Cultural Initiative Foundation established in Russia in 1987. Other groups in the Baltics, Ukraine, and elsewhere. Finance education reform, training for public administrators, and privatization institutes, for a total of $27 million annually.

CENTRAL EUROPEAN UNIVERSITY

Est. 1990 in Prague and Budapest. Allocated $25 million for five years to the regional institution, which currently offers programs in economics, politics, law, and other subjects.

SOROS HUMANITARIAN FOUNDATION FOR BOSNIA & HERZEGOVINA

Est. 1992. $50 million is pledged to provide everything from radios and medical equipment to satellite telephone hookups to enable citizens to get calls from overseas.

OPEN SOCIETY FOUNDATION–SOUTH AFRICA

Est. 1993. In 1981, Soros granted scholarships to black students at the University of Capetown. Now, Soros has pledged $15 million over three years to promote human rights and civil liberties.

INTERNATIONAL SCIENCE FOUNDATION

Est. 1992. $100 million pledged for two years to support scientific research in the former Soviet Union.

DATA: THE SOROS FOUNDATIONS

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aren't going to sell the properties in their inventories for a song," says the head of one national real estate investment firm who—the subject being Soros, after all—requested anonymity. Another real estate source notes that Soros is unlikely to be satisfied with the kind of annual returns that are prevalent in "bargain" real estate nowadays—8% a year. But Gladstein says that the Soros-Reichmann team is willing to be patient. "The market is depressed, and Paul Reichmann is a genius at picking properties that offer appreciation potential," he says.

Quantum Realty has not deployed any of its cash yet. But the Soros organization itself has done so. Last December, it snapped up a portfolio worth $350 million in commercial mortgages from the Resolution Trust Corp., and Reichmann and Soros are now zeroing in on a far more ambitious project—the mammoth Santa Fe development in Mexico City, which is one of the boldest schemes for urban development in the world. The $10 billion project has attracted major Mexican and multinational corporations—and among them are Soros and his new partner.

It is a project worthy of the Reichmanns of yore. Soros maintains that "nothing has been finalized there." But sources in Mexico say the Soros-Reichmann group has agreed to commence a project consisting of as many as 10 office buildings containing shops and housing, for an investment that would be considerable by U. S. standards and that is downright huge by Latin American standards—somewhere between $500 million and $700 million. In addition, Soros and Reichmann are finalizing their plans for an office building and historic preservation project elsewhere in Mexico City. All told, the Mexican projects will be worth some $1.5 billion.

SIZZLING ISRAEL. A top adviser to the city's Santa Fe developers confirmed that the parties have signed a letter of understanding to buy approximately 23 acres of land in two different parts of the Santa Fe project. The definitive contract will be signed this month, sources say. The group will buy 10 acres in Santa Fe's City Center, an area of offices, restaurants, and stores. The Soros-Reichmann group also is buying 13 acres in another area called Cruz Manca. In this development alone, they will be building 3.5 million to 4 million square feet of office and upper-income residential space.

Soros is, he readily admits, a neophyte at real estate. His approach to investing is more apparent in one of his smallest and most recent acquisitions—the purchase of a stake in a small Israeli high-tech company, Indigo Ltd. The Israeli stock market had been sizzling—but Soros didn't buy into that. Instead, he bought a 12.5% stake in Indigo, a privately held company, for $50 million of his own funds. The company sells computer printers that combine the quality of offset printing with the ease of a laser copier, and it needed a cash infusion to pay for its planned worldwide marketing effort. First Boston advised Indigo to sell a stake in the company to investors through a private placement. "Soros took a quick look at the offering and told First Boston he wanted the whole deal," Indigo CEO Benny Landa recalls.

What followed were months of detailed studies on every aspect of the company. Soros' own experts and consultants from all over the world conve on the little Israeli town of Nes Tsi to analyze the technology and the ket. "They even went to potential petitors to check out if we in fact the tiger by the tail," jokes Landa.

MOST MEMORABLE. After tough neg tions, a deal was completed in J Landa traveled to New York to with Soros, in what was to be the of many meetings. The talk turned subject that Soros rarely dwells u his Jewish identity. An ardent Zi Landa tried hard "to bring Soros h But Soros was unmoved. Says La "Here I was explainin him my outlook on Zio and Judaism and he tered with the evils of na alism and patriotism." Soros told BUSINESS WEE don't discriminate ag Jews—but I don't discrim in favor of them either."

If the ghosts of the caust still trouble Georg ros, he would be the la admit it. Some Jews ma troubled by Soros' lac ethnic identity. But W War II turned Soros an internationalist. It is a do that permeates all writings.

Perhaps Soros put it in his own words—in his book, *Underwriting Dem cy*: "As I looked around worthy cause, I ran into culties. I did not belon any special community. went to England in 1947 then to the United Stat 1956. But I never quite came an American."

But he did—in the fo sense, at least. George S became a naturalized A can citizen in New Yor Dec. 18, 1961, accordin the Immigration & Nat ization Service. His A canism, like his Judais not something that S openly embraces. T nearly a half-century the Holocaust, Soros ca quite let go of the urge to conceal cause that is crucial to the survival ic that has made him an enigma—a world-class investor. In his life, as as his work, George Soros is the q essential contrarian.

By Gary Weiss in New York and E. Schares in Budapest, with Geri S in Mexico City, Paula Dwyer in Lo Neal Sandler in Jerusalem, Karen Pe in New York, and bureau reports

PAUL REICHMANN OF O&Y IS SOROS' PARTNER IN $1.5 BILLION DEVELOPMENTS IN MEXICO

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THE WHITE HOUSE

BILL CLINTON'S MS. FIX-IT

Political pro Joan Baggett is now a key behind-the-scenes player

It was just days before the House was set to cast a fateful vote on President Clinton's budget last May, and Representative Robert E. Cramer Jr. (D-Ala.) was hopping mad. Vice-President Al Gore was considering a redesign of the space station, threatening hundreds of jobs in Cramer's Huntsville district. But the Alabaman was getting no help from the Clintonites. His planned revenge: a "no" vote on the budget.

That's when White House aide Joan N. Baggett, an affable pol with an advanced degree in tele-schmoozing, called Cramer. Soon, he was making his case to Gore, who ultimately opted for a less radical space-station redesign. Happy that he could demonstrate his clout to constituents, Cramer backed Clinton's economic plan. "Without Joan's involvement, I wouldn't have voted the way I did," he says.

CRUCIAL VOTES. Backstage drama like that doesn't make headlines, but it does win crucial votes for Clinton—no small matter considering the tough legislative challenges ahead. Just as important, Baggett, the White House political director, uses the power of the Presidency to help Democratic officeholders win support from voters back home.

As Ms. Fixit, Baggett spends endless hours chatting with state party chairs and elected officials, gathering intelligence to help the White House aid fellow Democrats and shape policy. She sends Cabinet secretaries into states that are key to Clinton's reelection, and she provides the President with data on local pols he meets on his travels. And in the runup to the crucial August budget votes she drummed up constituent backing to make it easier for wavering Democrats to vote "yes." Says Baggett: "When people feel like they're getting political support, then they can focus on the issues."

Baggett was promoted to director of the political office from her deputy position in June during a White House reshuffle. Her predecessor, Rahm I. Emanuel, considered too abrasive for the job of coddling Democrats, was sent to the communications office. Baggett is prepared to rap the knuckles of Democrats who abandon their President, denying them such goodies as Clinton visits to their districts. But getting even isn't her style. "I've been around Washington long enough to know that you can't burn bridges," she says.

Baggett, 41 and expecting her second child, bears no relation to the stereotypical fixer of old. But she has spent a lot of time in the trenches, including 15 years as political director of the bricklayers' union and a stint as chief of staff of the Democratic National Committee (DNC) during the fall campaign. She wasn't a Friend of Bill, but Baggett's skills won the attention of the high command. Says Clinton media adviser Mandy Grunwald: "If I was trying get something done, I'd call Joan."

Inside the Clinton White House, Ba gett stands apart from the legions Yale lawyers. She grew up the young of 10 children on a strawberry farm Repton, Ala.—population 246. Politi discourse was a dinnertime staple. deed, Democratic consultant Fra Greer thinks Baggett's upbringing is plus in the Clinton White House: "S brings a real American view to the that the Ivy League types don't have

After graduating from the Univers of Alabama, Baggett worked for Sena Jim Allen (D-Ala.). In 1974, at 23, s was hired to edit the bricklayers' ma zine and soon became political direct the first woman to hold a manageme job in the union. She commissioned p and focus groups, set up phone ban and turned the apolitical bricklayers i a potent force. "Joan was so effect that it always seemed that she rep sented a larger pile of money and m members than she really had," says chelle Horowitz, political director of American Federation of Teachers.

At the DNC, Baggett and the late P

BAGGETT: BUILDING ON HER BRICKLAYER EXPERIENCE

A SUPER-POL'S TOUGH AGENDA

Baggett must find support among contentious Democratic interest groups on several issues, including:

TRADE The North American Free Trade Agreement faces fierce opposition from labor and many Rust Belt Democrats

HEALTH CARE Clinton's market-based health-reform plan is upsetting unions that prefer a government-run system of universal coverage and seniors' groups that oppose Medicare cutbacks and want long-term-care coverage

THE NEW DEMOCRATIC AGENDA The White House is looking at entitlement cuts, may require welfare recipients to fin work after two years, and will push a tough crime bill

DATA: BUSINESS WEEK

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IBM

Tully, its political director, coordinated ties among the Clinton team, state and local parties, and congressional campaigns. Along the way, she met many local party officials, forging relationships that serve her well at the White House.

Baggett's labor experience will be helpful in the months ahead, when the Administration must sell its liberal backers on a program they view as too conservative. Core constituent blocs, such as senior citizens and labor, are unhappy with Clinton's procompetition health-care plan. Outraged unions and environmentalists vow to sink the North American Free Trade Agreement.

Keeping liberals inside Clinton's camp will tax even Baggett's skills—though union leaders concede that their former ally now has different responsibilities. "We don't have a higher call on her loyalties," says AFL-CIO Secretary-Treasurer Thomas R. Donahue. "But she will be able to distinguish between disagreement on a single issue and a holy war."

WIDER TIES. Although core constituencies are a major concern, Baggett is also broadening ties to party conservatives. Senator Richard C. Shelby (D-Ala.), who got the cold shoulder after calling Clinton the "tax man," credits Baggett with a recent rapprochement. "She knows she can always talk with me," he says.

With Clinton's legislative success tied to the fortunes of other Democratic officeholders, state and congressional elections are high on Baggett's agenda. This year, she's working for gubernatorial candidates James J. Florio in New Jersey and Mary Sue Terry in Virginia. To boost Florio, Baggett sent Energy Secretary Hazel R. O'Leary to praise New Jersey's streamlined utility rules. The Administration will also hold a splashy welfare-reform hearing in the state, designed to highlight Florio's own reforms.

Baggett will offer similar help to congressional Democrats who voted with the President on the budget. For instance, when Clinton unveils his health-care plan in September, he will travel to the district of Representative Louise M. Slaughter to showcase the health-care system in Rochester, N.Y.

With the budget victory as her guide, Baggett will spend the coming weeks dispensing favors to supporters such as Slaughter and reminding opponents that independence has a price. "We're not the office of retribution," Baggett says. "But if members see there's no difference in how we treat friends and those who don't work with the President, they won't see any reason to work with us." With several tough battles ahead, Baggett's mix of steel and velvet may keep Clinton on the winning track.

By Susan B. Garland, with Lee Walczak and Richard S. Dunham, in Washington

Information Processing

PERSONAL COMPUTERS

AST STEPS OUT OF THE SHADOWS

Its deal with Tandy has made it a PC giant overnight

For more than a decade, AST has been the unassuming plodder of the personal-computer business—a long-distance runner that quietly pressed on no matter how difficult the terrain. Year after year, the clonemaker has been consistently profitable, churning out copies of IBM PCs at discount prices. Although it never achieved the name recognition of Compaq Computer Corp. or the glitzy aura of Apple Computer Inc., it never suffered the public crises that have forced those companies periodically to reinvent themselves. During the protracted PC price wars, AST Research Inc. has gone about its business, slashing prices, squeezing out overhead, and avoiding upheaval. It even managed to move out most of its old management and bring in industry veterans without creating a stir.

Now it won't be so easy for the company, based in Irvine, Calif., to work quietly in the shadows. Suddenly, AST is one of the big guys, thanks to the completion last month of a deal to buy much of Tandy Corp.'s computer-making business. The $175 million acquisition overnight doubled AST's plant capacity and should boost annual sales by half, to more than $2 billion. The move catapults AST to the No. 4 spot in the PC business, leapfrogging Packard Bell, Dell Computer, and Gateway 2000. Based on 1992 shipments for Tandy and AST, the combined company is behind only Apple, IBM, and Compaq, says market researcher International Data Corp.

AIRLIFTS. For AST, it was an uncharacteristically bold move, but one that was necessary for the company's survival, says Safi U. Qureshey, AST's co-founder, president, and CEO. "With all the consolidation in the industry, the strong are getting stronger," he reasons. "This gives us economies of scale that we need in order to compete with the big guys." Adds Lise J. Buyer, a technology analyst at mutual-fund manager T. Rowe Price in Baltimore: "It's a stunning deal that will give AST the visibility it's lacked in the marketplace and the clout it needs to keep its costs down."

Qureshey's challenge now is to insur that the Tandy acquisition doesn't giv AST indigestion. It's no small task. H must integrate Tandy's troubled con puter business, which lost more tha $150 million in the past two years, int AST's lean and profitable operations. An he must reconcile two dramatically di ferent cultures, melding AST's traditio al focus on the high-end business marke with Tandy's reputation as a supplie to homes and small businesses.

With PC profit margins as thin as eg shells, AST has little room for error. An the Tandy acquisition already has h its bottom line: AST posted a $125 millio one-time charge against earnings la quarter to handle restructuring cost That led to a loss of $54 million on sale of $1.4 billion in the fiscal year that en ed July 3. AST's stock dropped onl about a point on the news and is no trading at around 15. But investors an customers are watching: "If they hav more write-downs this quarter and nex if they look like they're on shaky fina

AST'S BIG PC BITE: BEFORE AND AFTER THE TANDY DEAL

FISCAL YEAR	1993*	1994 EST.
REVENUES	$1.4 BILLION	$2.1 BILLION
EMPLOYEES	4,500	6,700
U.S. MARKET SHARE (UNITS)	2.8%	5.5%
MANUFACTURING CAPACITY	530,000 SQUARE FEET	1,030,000 SQUARE FEET
NUMBER OF FACTORIES	3	7

*FISCAL YEAR ENDS JULY 3

DATA: INTERNATIONAL DATA CORP., COMPANY REPORTS, BUSINESS WEEK ESTIMA

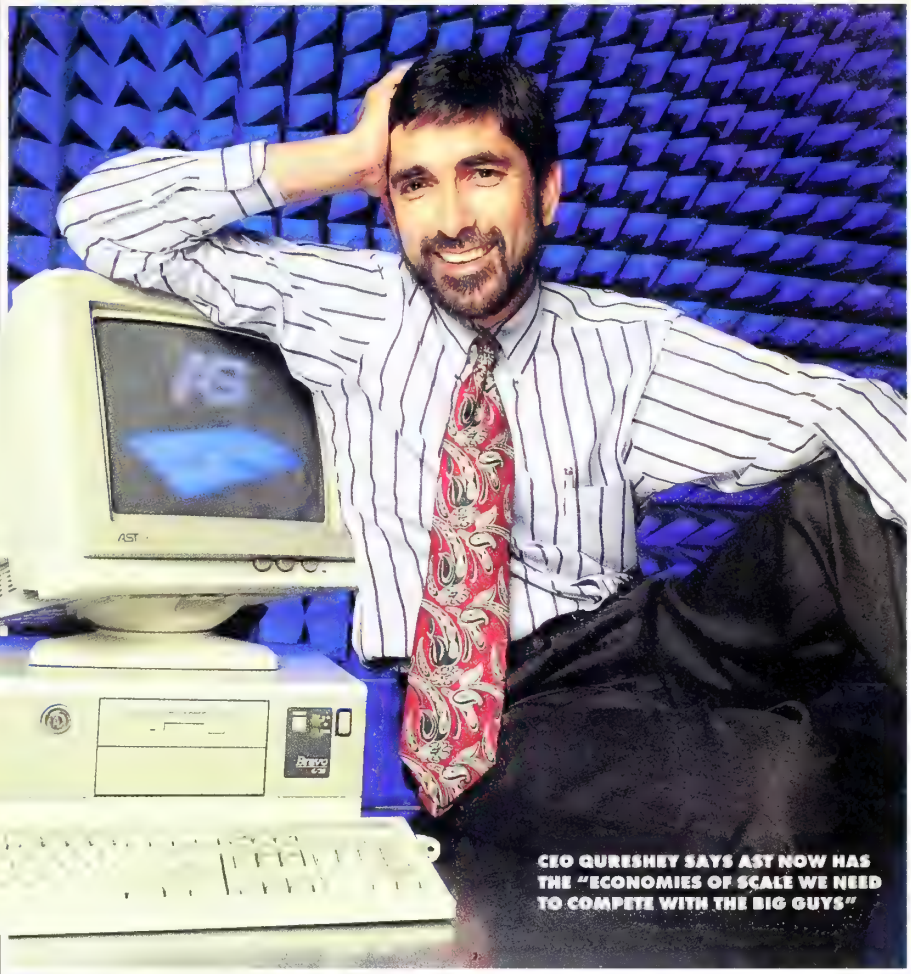
footing, their customers will start :ing them like they had leprosy," John C. McCarthy, director of tech- ;y research at Forrester Research a Cambridge (Mass.) consultant. ill, the two companies are a good nalysts say. AST factories in Califor- Hong Kong, and Taiwan have been ing at the limit for the past year, the company has resorted to air- g computers to Europe to keep up its growth there. The Tandy pur- e gives it a badly needed plant in and to supply its European cus- rs and three more in Fort h. AST also gained technolo- :t lacked: Tandy's GRiD Sys- subsidiary is the dominant ier of pen computers, and y has been in the forefront ilding multimedia capabilities ts PCs.

START. In addition, AST gets marketing goodies. It gains s to Tandy's forthcoming er device, a competitor to e's Newton that combines ectronic pocket organizer communications capabil- AST also has negotiated a -year contract to y Tandy-brand uters for sale gh Tandy's Ra- hack, Comput- :y, and Incred- Jniverse stores. That gives AST a r presence in the consumer market, ea it began to target about two ago.

e sales through Tandy's channels ey to the deal, accounting for up to)0 PCs in the next year, Qureshey s. "We'd been approached by many anies wanting to be bought, but /as the only one that made sense," ys. "If we bought a company that d like AST, we'd only cannibalize other's sales."

ther, the way the deal was struc- gives AST a giant head start on ng the two operations. "AST was o buy only the pieces it wanted," Howard D. Elias, a lifelong Tandy tive who is now AST's marketing resident. "It didn't buy a company mit that we have to dismantle in to integrate." Tandy kept its retail tions and is still trying to sell four businesses. In July, Tandy laid off than 500 white-collar employees AST didn't hire.

eshey figures that a new manage- team he has assembled over the ear gives AST the talent he needs sorb such a massive chunk of new ess. Working with AST's board, he ent much of that year quietly re- uring the company away from its preneurial roots by hiring profes-



CEO QURESHEY SAYS AST NOW HAS THE "ECONOMIES OF SCALE WE NEED TO COMPETE WITH THE BIG GUYS"

sional managers. A year ago, he engineered the board's ouster of Thomas C. K. Yuen, another of AST's founders, who had served as co-chairman. (The third co-founder, Albert C. Wong—the company's name stands for Albert, Safi, and Tom—was forced out in 1988.)

Since then, Qureshey has reorganized the company along geographic lines and has replaced more than half of AST's senior management with eight new hires, most of them from competitors such as Apple, IBM, and Digital Equipment. "We set up a classic organizational structure with a lot of empty boxes and set out to fill them with top-notch managers," says Carmelo J. Santoro, an outside director and AST's nonexecutive chairman for the past year. "We've already accomplished a major part of what I wanted to do."

RIPPING OUT ROOTS. Santoro, a veteran of the semiconductor industry, and AST's other outside director, Richard J. Goeglein, former CEO of hotelier Holiday Corp., set the stage for the new AST in a short, bittersweet meeting with Yuen and Qureshey 14 months ago. Goeglein told them that the outside directors had determined that the company would be better off with a single top executive, Qureshey, and Santoro as chairman. Yuen formally resigned from the board two weeks later, and Qureshey relinquished his chairman's post to Santoro.

Other than in the numbers, the real fruits of the merger are unlikely to start showing up much before early next year. That's when the first jointly developed product, a subnotebook computer, will be launched. But Tandy and AST have been making products for each other since April, so the product lines had already started to converge.

From the day the deal was announced, AST started actively courting Tandy customers. After joining Tandy Chairman John V. Roach to unveil the acquisition to Tandy employees in Fort Worth, Qureshey made a side trip to Tandy's biggest customer, AMR Corp., the parent of American Airlines Inc. "You never like a change, but this one's been relatively painless for us," says Terrell B. Jones, president of AMR's SABRE Computer Services.

"Painless" isn't the word that Qureshey would use to describe the merger. "There are different cultures and different methodologies to overcome, but it's just a part of this marathon we're running," he says. "In the end, it's worth any pain you have to go through." Spoken like a true long-distance runner.

By Larry Armstrong in Irvine, Calif., with Peter Burrows in Dallas

DRUGS

A STAR DRUG IS BORN

How DNase was hurled into combat against cystic fibrosis

In June, 1988, Steven Shak was bleary-eyed from searching through old scientific texts. The Genentech Inc. researcher was convinced he could find an enzyme to attack the thick mucus that plagues cystic fibrosis sufferers, the residue of infections that eventually destroy their lungs. Shak imagined spraying such an enzyme into the air passages of patients to help them cough up the sputum and breathe more easily. His quest led him to a cow enzyme called deoxyribonuclease. But when the first samples of the stuff arrived, Shak's heart sank. "Do not shake," said the warning label. If the enzyme was that fragile, it would never work as a spray.

The young scientist persisted, however. He soon discovered that the enzyme was more robust than he thought. And on Aug. 9, his work paid off: A Food & Drug Administration advisory committee recommended a human cousin of the enzyme, a drug called DNase, as a treatment for the nation's 20,000 CF victims.

That victory after only a single minor snag concluded one of the most remarkable efforts in the recent history of drug development. DNase is just a treatment, not a cure. Still, coming as it does after several stagnant years for Genentech, it will go a long way toward restoring the company's reputation as biotechnology's pacesetter. DNase is "a true clinical breakthrough," says Harri V. Taranto, managing director of the Wilkerson Group Inc., a medical products consulting firm. Since DNase promises to cut treatment costs, he adds, "it's the prototype of what the industry needs to put out for the rest of the 1990s."

It's a prototype, too, for how creativity and determination can defy the odds of drug development. Pharmaceutical executives, in an effort to defend price increases, often lament that it takes some $359 million and 12 years on average to develop a drug. By comparison, DNase looks like a bargain. While the company won't reveal its investment, knowledgeable sources put the development tab so far at a relatively modest $100 million. In part, that's because Genentech took unusual risks to accelerate R&D—and delivered DNase in just five years.

SHOW TIME. Just as notable, much of this was accomplished by a team of young scientists, some of whom, like Shak, had no experience in drug development. A pulmonary physician by training, he left academe for Genentech in 1986, driven by the desire to find treatments using basic science. He came along just as the company was launching t-PA, its best-known drug. That gene-spliced enzyme, which breaks apart the blood clots that cause heart attacks, gave Shak the idea that an enzyme might do the same for CF.

Once Shak proved in mid-1988 that his enzyme could survive in a spray, his bosses turned him loose to gene-splice a human variety. In theory, it would chew up excess DNA—the main ingredient of sputum lining the lungs of CF patients. After four months of 100-hour weeks in the lab, Shak had a beaker's worth of his potion and was ready for the test that shook Genentech. He took mucus from a CF patient, cut it in half with a razor, and divided it between two tubes. He poured saline solution in DNase in the other, then turned th upside down. Almost instantly, the tum in the DNase tube turned to li and ran down the side; the gunk in other stayed put. Shak showed every his "thing in a test tube," as Genent ers dubbed it. The results were so matic "it didn't take a lot to get the ahead to drop everything else I doing," he recalls.

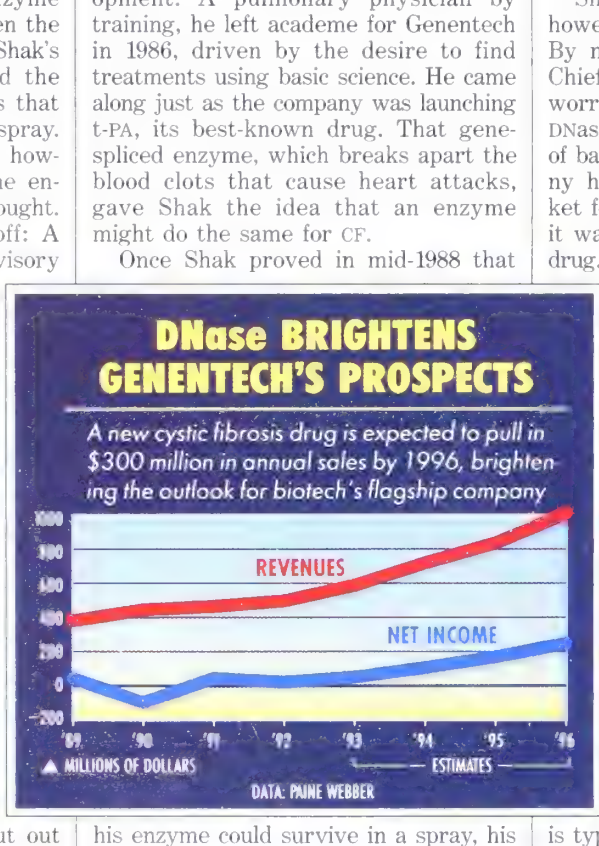
Arthur D. Levinson, senior vice-p ident for research and development, mediately put the chance that DN would become a drug at 70%, an heard-of level at such an early st even for Genentech's can-do gene jo By the fall of 1988, Shak had forme 15-person team with staff members f marketing, manufacturing, and R&D. ensuing progress was so speedy "I'm not sure we could have save week in the whole process," Levin says, looking back.

Shak's team shifted into overdr however, just as Genentech stumb By mid-1989, then-President and Chief Executive G. Kirk Raab begai worry that funding for projects such DNase was in jeopardy. After a dec of barrier-breaking successes, the com ny had wildly overestimated the m ket for t-PA at $1 billion annually, w it was looking more like a $200 mil drug. That meant Genentech needed er sources of funds to finance R&D. In late 1989, when R asked Shak to give a prese tion on DNase to a visitor f the Swiss drug giant Roche H ing Ltd., Shak had no idea important his talk would be.

In early 1990, Genentech agr to sell 60% of itself to Roche $2.1 billion. Today, that visi Jergen Drewes, president of in national R&D for Roche, s Shak's enthusiasm for DN helped bring about the deal. they can [be this creativ Drewes recalls thinking, "they going to make a difference."

It wasn't just Shak's bri idea that Drewes liked—Gen tech made and tested DNase winning way. Developing dr is typically a serial process, since bio ical experimentation is prone to surp es. Management's confidence in DN however, prompted Genentech to p form some key tasks in parallel—m like concurrent engineering in the a and electronic industries.

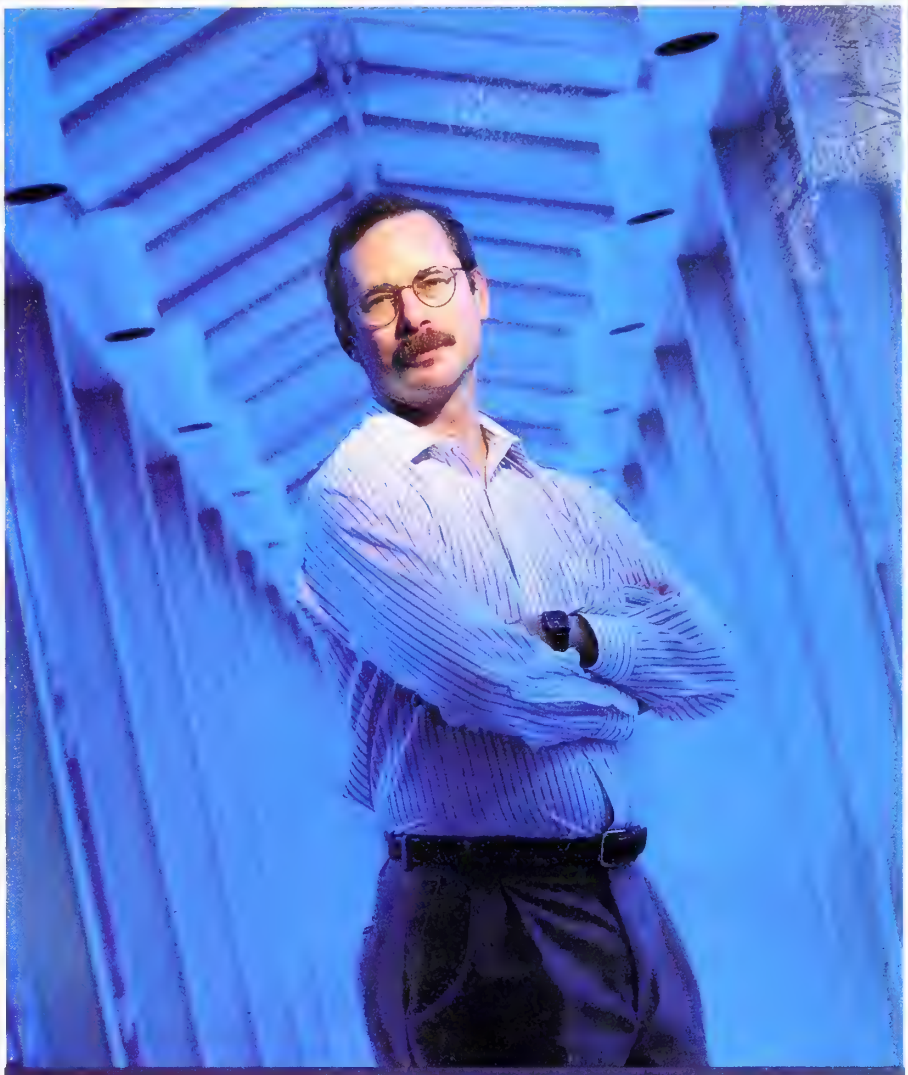
At Genentech, a decision to leap conventional lab procedure made current development possible. Biot



s are made using genetically engi-
ed cells to churn out large amounts
lesired protein—such as DNase. The
lines" that do this can be made in
a few weeks. But lines created that
ly often aren't very productive:
make only enough material for a
trial, with higher-yielding cell lines
l later. On DNase, Levinson skipped
rst step. He had his lab go straight
igh-yield line, a nine-month effort.
at decision produced large amounts
ase for testing earlier than Genen-
would have gotten otherwise. And
olved the company's manufactur-
ngineers in the final process earlier
usual. That earned a big payoff. If
rocess for making a biotech drug is
ed after the drug is tested in peo-
he FDA requires special studies to
that the drug doesn't change with
nethod. By developing the high-
line early, says Craig W. Rice, asso-
director of cell culture production
nanufacturing, his team kept pro-
m consistent into commercial runs
avoided extra studies. That, he
s, shaved as many as four years
e approval process.

another calculated bet, Genentech
another shortcut. It began build-
$40 million DNase production facil-
February, 1992—well before fin-
tests of the drug on humans. That
he pressure on Henry J. Fuchs,
mpany's associate director of clin-
esearch. A month earlier, Fuchs
arted a 968-patient trial, the most
sive ever on CF sufferers. The 35-
ld physician, who had come to Ge-
ch in 1988 from academe, tapped
he network of CF care-givers, par-
patients, and researchers, and ran
in 51 of the Cystic Fibrosis Foun-
's 114 centers. Patients reported
relief from the drug. "I noticed
ifference immediately," says Don
24, of Garrettville, Ohio. "It in-
d my energy, and my lungs stayed
r."

JL FEDS. Once DNase gets final FDA
val, which is expected shortly, doc-
vill likely prescribe it as a daily
ation, inhaled through an atomizer.
igh not a cure, the drug can cut
nfections and the use of antibiotics
out 30%, the trials showed. So far,
rimary side effect of the drug
to be hoarseness. The tests also
that DNase can boost lung function
8% and cut average hospital stays
days, or 18%, over a six-month
. Genentech can thank the FDA



STEVEN SHAK'S TEST-TUBE DEMONSTRATION WAS SO DRAMATIC HE GOT "THE GO-AHEAD TO DROP EVERYTHING ELSE I WAS DOING"

for some of that data: Initially, the company intended to measure just lung function. But regulators, who seemed predisposed to facilitate approval, suggested measuring the other clinical signs.

Those statistics should help the company defend the drug's price, which analysts expect to be $10,000 to $15,000 per year. That sounds hefty, but some doctors say CF patients spend up to $50,000 a year on antibiotics and hospitalization. DNase, they add, could eliminate some of those costs. There's one more plus. While doctors expect most patients to continue the daily back and chest pounding called "percussion therapy" that loosens the mucus so it can be expelled, some—including West—can clear their lungs using just DNase. That's an improvement in quality of life that's hard to quantify.

Analysts estimate that DNase is likely to generate some $300 million in annual revenues by 1996. Eventually it could produce up to $500 million in yearly revenues worldwide if it is used on other pulmonary maladies—it's now being tested on chronic bronchitis. Roche will help by co-marketing the drug in Europe. Strong sales of DNase—combined with a brightening outlook at last for t-PA and a handful of promising drugs in the pipeline for fighting cancer and inflammatory diseases—could end five years of erratic profits at Genentech (chart). In just the past few months, in fact, the company's stock has risen to 44, a five-year high. That can only help reinforce

Rather than serially, some key development tasks were performed in parallel—much like concurrent engineering

Drewes' pledge to "protect Genentech from a stifling embrace."

Other CF drugs still in testing could one day dim Genentech's rosier outlook. And an exciting new approach called gene therapy has the potential to cure CF, making DNase obsolete. That could be even a bigger market, since a cure for CF would command a premium over drugs that just treat some of its symptoms. Genentech has tried to buy insurance for that day by investing in GenVec, a gene therapy startup (box).

It's true that not every drug can sail though development as smoothly as DNase, whose potential was extraordinarily clear from the start. Many treatments for complex conditions such as cancer are not nearly so straightforward, so a more cautious approach is warranted. Still, Levinson thinks DN success will have a residual benefit Genentech—that it will inspire the c pany's researchers to aim higher, ev not every mission succeeds. Shak one, is glad he enlisted: "If I'd had idea in academia," he smiles, "not would have happened."

By Joan O' C. Hamilton in South Francisco

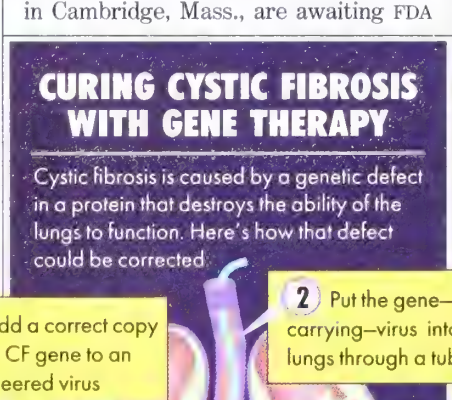
THE $600 MILLION HORSE RACE

In 1989, scientists studying cystic fibrosis made a historic discovery by identifying a stretch of flawed DNA that causes the disease. As well as helping researchers solve the biological mysteries of the inherited illness, this find opened the door to the revolutionary idea of gene therapy—curing the disease by inserting into patients' lung cells correct copies of the gene.

Today, one clinical trial of gene therapy to cure cystic fibrosis is under way at the National Institutes of Health. On Aug. 4, the Food & Drug Administration approved another, at the University of Pennsylvania. Meanwhile, companies are racing to capture the potentially lucrative gene therapy market. "The field has moved so quickly, it's remarkable," says Dr. Ronald G. Crystal, chief of pulmonary medicine at New York Hospital-Cornell Medical Center, leader of the NIH trial, and co-founder of gene therapy startup GenVec in Rockville, Md. Many researchers are confident that one day gene therapy will render drugs such as Genentech Inc.'s DNase obsolete.

TRICKY PROCESS. That doesn't mean that a genetic cure for CF is imminent. "We are still in the very early days," cautions Dr. Richard C. Boucher, director of the division of pulmonary diseases at the University of North Carolina at Chapel Hill (UNC). Still, scientists know that CF is caused by a defect in a protein that leads to the accumulation of mucus in the lungs. The mucus makes breathing difficult and breeds infections. If doctors slipped in a normal gene, inducing cells to make the correct protein, they could prevent the buildup and produce a cure.

The trick is inserting the gene. Four years ago, taking his cue from French researchers who had snipped out disease-causing genes in viruses of the pneumonia family, Crystal devised a plan. Since these adenoviruses do infect lung cells and carry in their own genes, why not splice in the CF gene and use the emasculated virus as a delivery truck? Animal experiments proved the scheme worked well enough to begin human trials. So on Apr. 17, Crystal dripped the engineered adenovirus into the lungs of the first CF patient. Genetic Therapy Inc. in Gaithersburg, Md., and Genzyme Corp. in Cambridge, Mass., are awaiting FDA approval for similar trials. Meanwhile, GenVec, buoyed by an investment from Genentech worth up to $17 million, is refining its system and planning more elaborate trials.



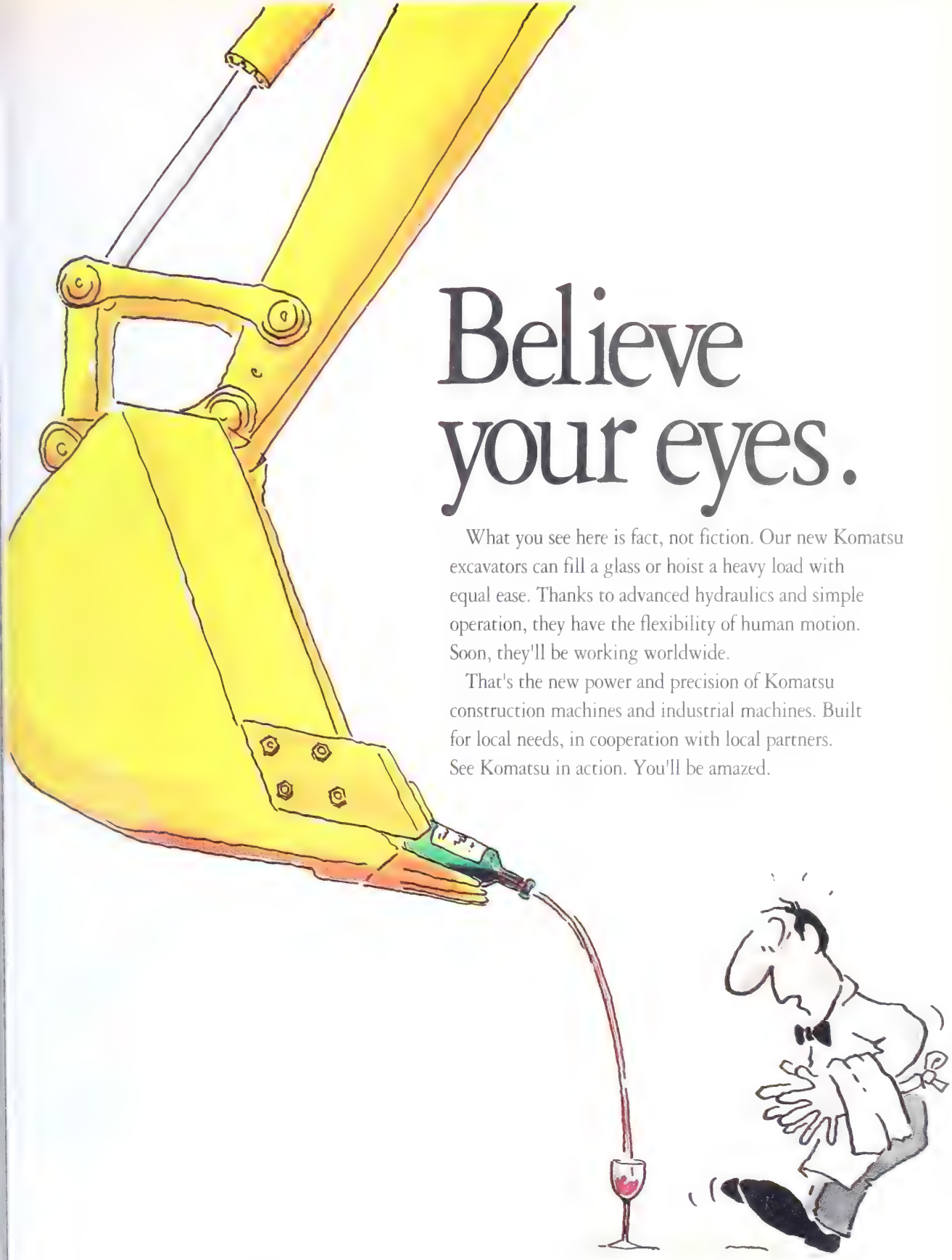
The adenovirus delivery system does pose risks. It retains a hunk of original viral DNA and seems to provoke the immune system. The first NIH patient to receive a dose close to that needed to actually fight the disease suffered significant inflammation in the lungs. "We now have to go back to lower doses and figure out the mechanis says Crystal. In addition, adenoviru don't splice genes into cells' own D Instead, the added genes are gradu chewed up by the cells' trash syste

MAGIC BULLET? As a result, the ge must be reintroduced every few we or months. That's chancy since t body's defenses might begin attack the virus. So researchers are try new strategies. One of the most pr ising, still in development, enlists ally called an adeno-associated vir This unusual beast inserts its ge into the DNA of lung cells without ca ing discernible infections—and mi deliver the CF gene without prov ing an immune-system respon "There's a lot of excitement that t might be the magic bullet," s researcher Richard J. Samul director of the gene therapy c ter at UNC. Researchers at Jo Hopkins University and Seattl Targeted Genetics Inc. hope to st clinical trials by the end of 1994.

A few scientists are avoiding viru and delivering genes wrapped in attached to fat molecules. Skept doubt this method will prompt cells make enough of the correct protein treat the disease. But unpublished periments by Robert J. Debs of University of California-San Franci and researchers at San Francisco-ba Megabios indicate that it is an " traordinarily powerful system with the problems of viruses," Debs insis

In short, "it's a horse race," s Samulski. And the prize is huge: fa sales that could hit $600 million a ye and the chance to end the suffering patients. Those payoffs have attra ed millions in funding from the gove ment, venture capitalists, and com nies—enough to lay the foundation gene therapy for other diseases. P dicts Hal Broderson, acting CEO of G Vec: "The 1990s will bring a new era genes as drugs."

By John Carey in Washing



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Developments to Watch

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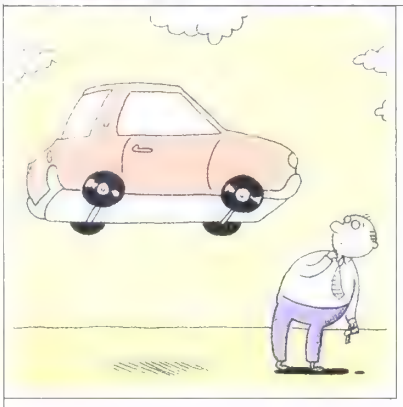
THE BIG THREE TEAM UP TO TAKE THE WEIGHT OFF



After drivers spurned downsized cars in the 1980s, Detroit turned its efforts to other ways of trimming weight to improve fuel economy. The next turn of that screw will come from lighter metals. On Aug. 5, General Motors, Ford, and Chrysler launched a cooperative research program to promote the use of aluminum, magnesium, and metal-matrix composites.

Light metals currently account for less than 200 pounds of an average vehicle's weight, but that could triple, according to the U. S. Council for Automotive Research. USCAR will oversee the program as part of another effort that is already probing plastics and other alternatives to weighty metals. As if to underscore the new thrust, Ford Motor Co. has unveiled two concept cars that rely heavily on light metals. The Synthesis-2010 uses aluminum for every major component and stamping—and weighs in a half-ton lighter than a Mercury Sable. The second is an extensively "aluminized" Sable that trims weight by nearly 400 pounds.

A HEARING AID THAT BOOSTS THE DRUM'S BEAT

Less than a quarter of the 26 million Americans with hearing problems routinely wear a hearing aid. Many others would sooner suffer a loss of hearing than a loss of vanity. For the self-conscious, a solution could be in the offing: a hearing aid that's the equivalent of a contact lens.

Developed by Resound Corp. in Redwood City, Calif., the new device uses a tiny magnet, dubbed Earlens, that's affixed directly to the eardrum. Held in place by a drop of oil, just as fluid keeps a contact lens on the eye, it can be inserted by a doctor in just a minute. The Earlens doesn't amplify sound as such—rather, it amplifies the movements of the eardrum that produce the sensation of sound—so the result is better-quality hearing. The eardrum magnet is activated by signals from a tiny receiver that can be worn on a necklace or pinned to undergarments. Resound plans to roll out the devices in Europe next year.

CIRCUITS MADE OF SOLID ALUMINUM: UNISYS IS ON THE TRAIL

Unisys Corp. raised eyebrows two months ago by saying that it is considering a radical approach to making printed-circuit boards: putting the circuitry on solid aluminum sheets instead of laying copper patterns on a laminated base. What makes the idea especially novel is its source: the former Soviet republic of Belarus. By now, aluminum circuit boards should be coming off an experimental production line whose finishing touches were added on Aug. 6, says Thomas D. Watson, strategic planning director for electronic systems.

How can conductive circuits be created in solid aluminum? By surrounding the flat "wires" on the board with alumi oxide, which is an electrical insulator—and which is ea formed by treating the boards with common citric acid. T eliminates the need for the highly toxic chemicals now use processing circuit boards.

What's more, since aluminum oxide isn't a thermal insula the boards dissipate heat much faster, which means c can be packed tighter without danger of frying. Some Watson speculates, even the chips themselves might be fa cated on aluminum to reduce the risk of overheating. T sounds as if Unisys is leaning toward licensing the techno from East/West Technology Partners Ltd., the Arlington (organization representing the Belarussians. But officially, decision hasn't been made yet.

MAKING HOME BANKING AN EASIER SELL

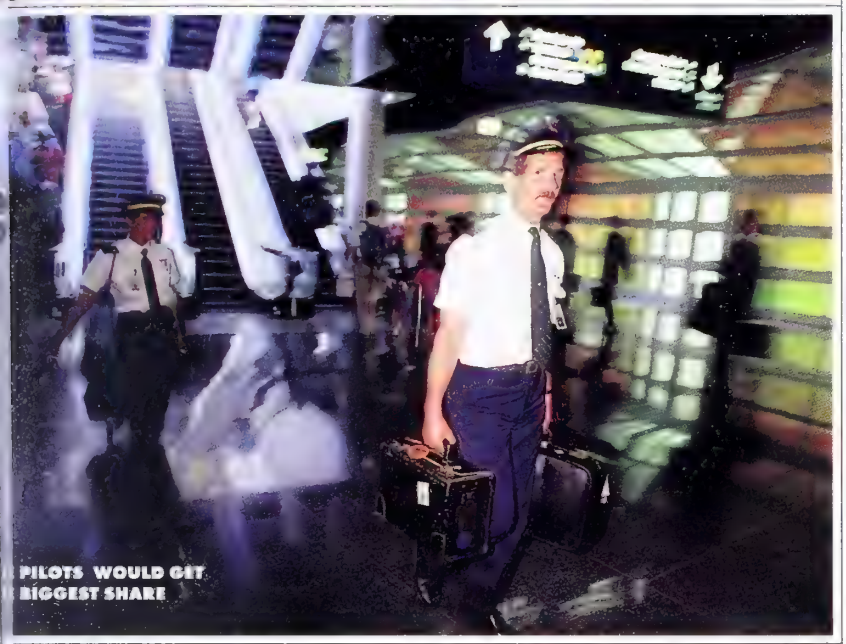
Home banking may be set for a comeback, judging from success at Baltimore's Maryland National Bank. One is how the technology is packaged. No personal compute needed, just a special telephone that sports a miniature ver of an automated teller machine's display. That's fitting, s the phone talks to the same data network that serves ATMs. Anyone familiar with an ATM has no problem u the phone for anything an ATM can do—except dispense c The technology was developed by Online Resources & Com nications Corp. in McLean, Va., and has just won a pater

Another factor is cost. After a consumer buys the phone for $80, Maryland National charges home bankers $6.95 a month. That's cheaper than mailing checks if you 20 bills a month, which is the average among users. Clos 5,000 customers signed up in the first six months, says Or Resources President Matthew P. Lawlor. "That's unheard c home banking," he adds, drawing on experience. Before fo ing Online Resources, Lawlor headed home banking at N York's Chemical Bank.

MID-ATLANTIC— THE FINAL FRONTIER?

Like its lookalike, the starship Enterprise, the NCC-1701 will go where no one has gone before—only down, not up. Scientists at the Woods Hole Oceanographic Institution are almost ready to send their $1 million robotic submarine on its maiden deep-sea dive. The craft looks so much like the Enterprise that engineer Albert M. Bradley had the same designation number painted on its side.

Eventually, this inner-space ship will descend to 20 feet and hang around on the sea floor for months on end. I ing prolonged studies of such phenomena as the "black sn er" vents that Woods Hole discovered in the mid-Atla seabed in 1977, the sub will periodically go to sleep to conse battery power. Among its chief targets will be the enzy that manage to thrive in the superhot water around smokers. Such enzymes might open the door to new high-t perature industrial processes that aren't now feasible.



PILOTS WOULD GET BIGGEST SHARE

ITED'S UNIONS WOULD THER BUY THAN STRIKE

: expects concessions to win it the power to save jobs

ou can say one thing for the 8,300 pilots at UAL Corp.'s United Airlines Inc.: they're no quitters. ots' union has led three failed ef- nce 1987 to buy the carrier. Now, ıew tactics, it's at it again. The ls essentially were leveraged buy- ıat failed when United's three couldn't raise the billions needed. ne, the plan is more like a recap- ion, avoiding the need to borrow. motivation has shifted, too. Orig- the pilots hoped a buyout would ıff demands for deep wage cuts ıse that led to a 29-day strike in his time, all three unions—pilots, ıics, and flight attendants—worry new round of restructuring in an y plagued with excess capacity d to large layoffs. To block Unit- ıns to shed assets, labor has of- ıts of 15% for a 60% stake in the "We are searching for a way to ıb losses," says one union source ed. "If we can get a significant ı the company, employees can di- eir own future."

threat to jobs is real enough. Re- United said that it would sell its itchens, which employ 5,800 mem- 0% of the local mechanics union. It has discussed having outside companies repair aircraft engines. It plans to base some flight attendants in Taipei, which means hiring foreign workers instead of U. S. ones. And management has threatened to spin off short-haul routes.

The problem for the unions is that United is too healthy to have to deal on their terms. Last year, unions swapped concessions for a 45% stake in Trans World Airlines Inc. This summer, labor groups got 30% of Northwest Airlines Inc. in exchange for pay cuts. But those airlines were on the brink of collapse, and neither had public stockholders to satisfy. United is a public company and in relatively decent shape despite recent large losses. So labor must top the company's stock price, currently $144, which means raising at least $3.5 billion. In 1990, United's board accepted labor's bid, but it couldn't raise the money.

To circumvent this problem, the unions are making an unusual offer. The only cash existing stockholders would get—some $500 million, or $20 a share—would come from United's stash of about $1.9 billion. Stockholders also would keep 40% of the company, worth another $58 a share at the current price. And they would get a new equity issue, probably a convertible preferred series. Its value would be enhanced by the concessions, which would produce a newly competitive cost structure. Union insiders say that the cuts would reduce United's total wage-and-benefit tab—$4.56 billion last year—by 15% vs. what it would otherwise be in five years (table). For instance, pilots would accept an immediate 11.9% cut in pay, forgo a 4.7% wage hike due in October, and allow pension contributions to drop from 8% of pay to 1%.

In return, each union would get stock based on the size of its cuts. Each also would get one of United's 13 board seats, with another going to a representative of United's 25,000 nonunionized employees. While labor wouldn't have actual control over asset sales, it would gain early access to strategic plans. "That would give the unions a preemptive opportunity to come up with alternatives," says Joseph R. Blasi, a management professor at Rutgers University.

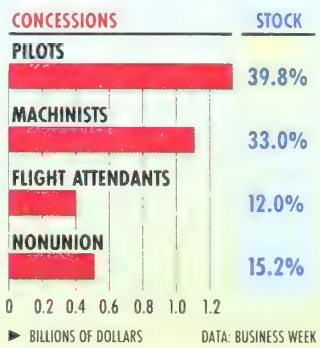
RISKY. United is taking the bid seriously. Lawyers and investment bankers from both sides have met in New York to go over details. The major sticking point is likely to be price. The unions want to pay a small premium over the current price, while management wants $180 a share, insiders say. The gap could be bridged by reducing the share labor would own. But the unions say they see no point in doing the deal if labor fails to gain a majority interest.

Union leaders concede that United faces competitive problems even if the buyout goes through. So any stock employees wind up with could be a risky investment. But as employees at TWA and Northwest decided, that may be a better choice than life without a job.

By Kevin Kelly in Chicago and Aaron Bernstein in New York

HOW LABOR HOPES TO TAKE OVER UNITED

The unions want to trade $3.36 billion in cutbacks for up to 60% of United's stock. Here's what each group would give—and receive of labor's share.



MERCK IS SHOWING ITS AGE

The days of boffo growth may be over as the labs come up short

To give visitors an idea of how easy it is to slip up in drug development, financial wizards at Merck & Co. in 1987 developed a novel computer simulation called DRUG—the Drug Research Uncertainty Game. Spend enough money and hit a few breakthroughs? Balloons and confetti color the screen. But run into a dry stretch? A little Pac-Man creature, labeled Devour Inc., snaps up the player, Drugs-R-Us.

Lately, there have been few balloons and little confetti at Merck. Efforts to develop new drugs for complex diseases, combined with a reluctance to embrace new research methods through biotechnology, have significantly emptied the product pipeline that once fueled Merck's staggering growth. Adding to the drug giant's research-and-development woes is a bureaucracy that has slowed the scientific process. Says Hemant K. Shah, a Merck marketing veteran who now works as an independent industry analyst: "There are no billion-dollar drugs in Merck's pipeline that I can see."

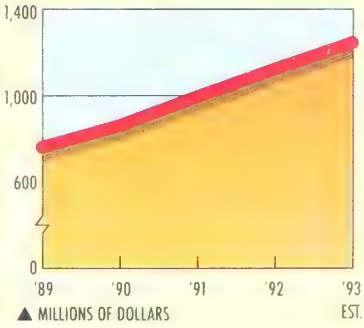
While Devour Inc. isn't about to gobble up Merck, the R&D shortfall is taking a toll. The heady 27% annual earnings growth of the late 1980s has slowed. Analyst Mariola B. Haggar of Salomon Brothers Inc. estimates that profits at the White House Station (N. J.) company may rise only 9% this year, to $2.7 billion, as sales rise just 6.4%, to $10.3 billion (chart). Merck says its 1993 earnings are being depressed by health-care cost containment, the effects of unfavorable currency rates, and startup costs for Proscar, its new prostate-shrinking drug.

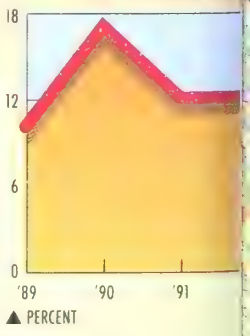
CEO P. Roy Vagelos' announcement on July 28 that Merck intends to acquire fast-growing drug distributor Medco Containment Services Inc. has done little to soothe anxious investors. Already upset at the unexplained departure of Vagelos' hand-picked successor, Richard J. Markham, investors have reacted coolly to the costly deal. Indeed, Merck's stock has fallen almost 7%, to around 30 since the deal was disclosed, despite a 12% dividend hike. Since early 1992, the stock has slipped nearly 47%. On Aug. 5, some Medco shareholders filed lawsuits to block the merger. One of their biggest gripes: Medco Chairman Martin J. Wygod could pocket $60 million in fees if the deal goes through.

BROAD RANGE. Merck competitors also question whether the deal makes sense. Says David Barnes, chief executive of British drugmaker Zeneca Group PLC: "If I had $6 billion to spend, I'd be looking in another direction." Vagelos, other senior executives, and members of Merck's board declined to be interviewed for this article. But the company responded to written questions.

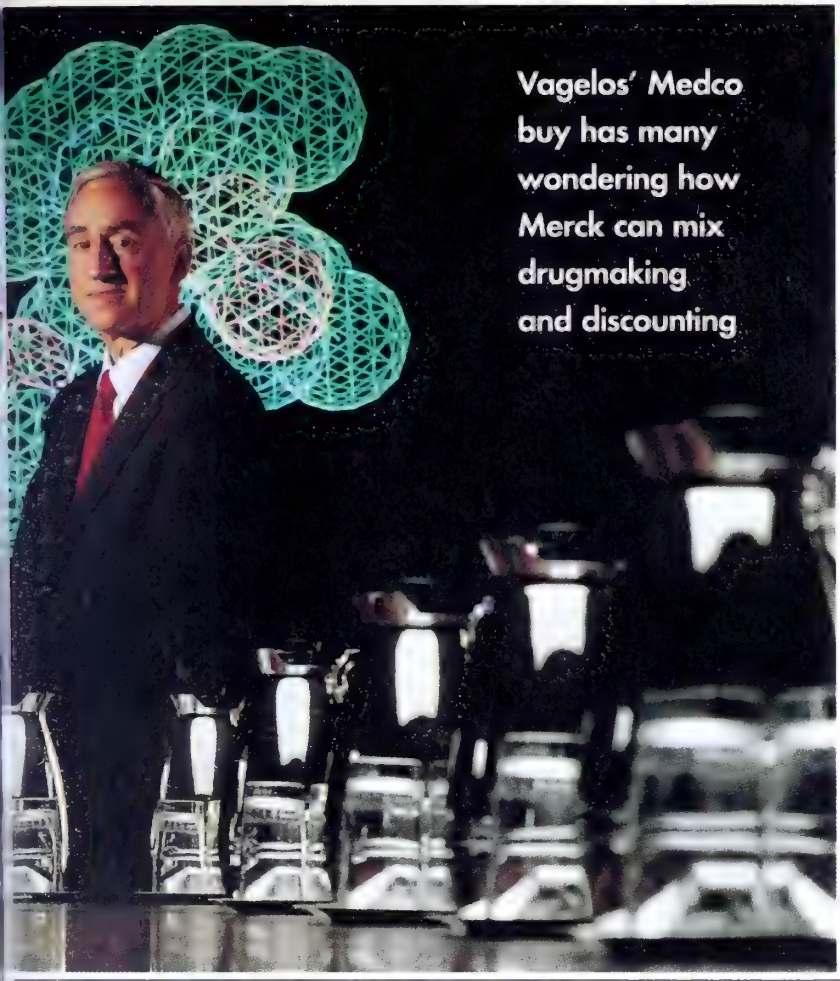
Vagelos' boosters argue that the deal represents a shrewd positioning of Merck for sweeping changes in the tion's health-care system. But it R&D, not marketing, that made the maker one of America's most succe corporations. In 1993 alone, the com is expected to spend $1.2 billion on second in the industry only to Hoffm La Roche Inc. That kind of investi has paid off. Merck boasts the b est product line in the industry, some 16 drugs that each bring in than $100 million in revenues a Among the top sellers: Vasotec, a to control hypertension, and chol rol-reducer Mevacor.

But lately, Merck's labs have





DATA: COMPANY REPORTS, SALOMON BROS. INC., HKS & CO., BUSINESS WEEK



Vagelos' Medco buy has many wondering how Merck can mix drugmaking and discounting

; it down. For instance, Proscar › have been its next billion-dollar But annual sales may eventually at around $500 million, analysts he year-old drug shrinks swollen tes in about half of prostate-dis- ufferers. But it's a bust with urol- and many patients because it t ease uncomfortable symptoms st users. Merck says it's counting nassive education program to en- 'roscar's success.

/ did this venerable scientific lead- on the ailing list? Partly, it's feel- e impact of a slowdown in advanc- its traditional chemistry-based research. The drugs Merck won big with in the 1980s were the result of efforts in the 1970s to find chemical combinations to combat diseases. Mevacor was developed from basic research done over 25 years ago. But fewer big discoveries occurred through traditional approaches in the 1980s. The breakthroughs then were in biotech, which Merck only dabbled in. Biotech was seen as a way to make injectable drugs rather than pills, which have more sales potential.

What's more, the diseases that Merck is setting out to conquer are far more complex. In the past, the company has thrived by developing treatments for relatively well-studied ailments, such as cardiovascular problems and gastrointestinal difficulties. Now, Merck is trying to perfect drugs for far tougher ills, such as schizophrenia and cancer. As long as the causes of such ailments remain murky, treatments will be elusive.

Still, not all of Merck's R&D woes can be blamed on the exigencies of science. The company's culture has also slowed its research efforts. Merck's labs span the world, yet decision-making is centralized and bureaucratic, say ex-Merck researchers. "The bigger you get, the more dinosaur-like you become," says Joshua Boger, a former senior director of basic chemistry at Merck who left in 1989 to found Vertex Pharmaceuticals Inc. in Cambridge, Mass.

Defectors from Merck say the slow-moving bureaucracy has driven much scientific talent to competitors over the years. And worse, say the former Merck scientists, by the time prospective projects percolate up through rigorous reviews nimbler rivals have passed the company by. For instance, startup Praxis Biologics, now part of American Cyanamid, beat Merck in developing a meningitis vaccine in the late 1980s.

Merck, however, insists that its research department is more entrepreneurial and flexible than most. The company also says it can develop drugs far faster than its competitors.

To preserve its fading growth rates, Merck has pressed its researchers to pursue blockbuster drugs, in effect shunning drugs with smaller sales potential. By contrast, innovative rivals such as Rhône-Poulenc Rorer have been helped mightily by hefty collections of small drugs. Scientists at the National Cancer Institute complain that Merck has rebuffed suggestions that it develop a promising bladder-cancer drug because sales would likely fall short of $100 million annually. For all its focus on blockbusters, though, Merck now has few potential drugs in its pipeline that could approach the popularity of its current big sellers (table).

SALES SLOWDOWN. That R&D sluggishness leaves Merck struggling to boost sales of an aging product line. By analyst Shah's count, sales are flat or declining for 15 Merck drugs that together account for about $3.5 billion in annual sales. Merck disputes that tally, but even Vagelos has conceded that sales can't grow fast enough to sustain Merck's dizzying growth of past years. And the company can't get any help from price hikes, since it pledged to keep price increases in the U. S. below the inflation rate. Prices are also being curbed abroad. Germany, for example, mandated a 5% cut in drug prices in January.

Vagelos, 63, has taken steps to change Merck's ways. The company is belatedly trying its hand at biotech, for one. It recently broke ground on a biotech manufacturing complex in West Point, Pa., to work with its vaccine operations. Merck is also developing a line of generic drugs to appeal to health-maintenance organizations and third-party payers such as insurance companies and corporate benefit plans, which are replacing

...AND ITS PRODUCT PELINE W ON'T HELP MUCH

ug to treat schizophrenia, it's made under license h partner Astra. May offer few meaningful when introduced in the U.S. in 1995-1996.

pected to be introduced in 1996-97, this osteo- will likely enter a crowded field in the U.S. umes may not come until the turn of the century.

TASSIUM A cardiovascular drug developed in a with DuPont, it'll compete in one of the industry's ed fields when introduced in 1996-97.

sthma treatment, expected in 1997-98, faces etition from rivals.

physicians, as the drug industry's chief customers.

Still, nothing has sparked as much debate within the industry as Merck's decision to buy Medco, which distributes pharmaceuticals by mail. The drugmaker will have to borrow $2.4 billion and issue 112 million new shares to make the acquisition. Merck concedes that the deal will further depress earnings growth for up to three years. But Vagelos argues that Medco will help Merck's R&D and sales efforts. The data on patient use and misuse—such as lapses in taking medication—may help in designing new drugs. He envisions a dazzling electronic information link from patients to Merck marketers and labs.

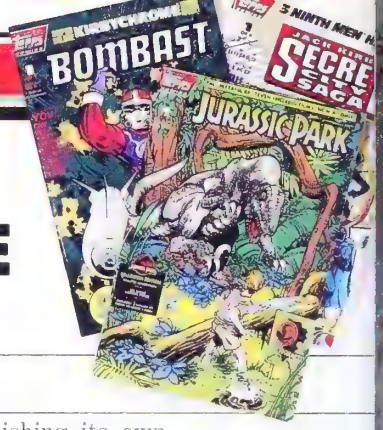
BUYING TO BURY IT? But it isn't clear that Medco is the right medicine for Merck. A key problem: The two have some directly opposing interests. Medco has risen from $20 million in annual sales 10 years ago to $2.2 billion because it excels at hammering away at drugmakers for discounts, which it passes on to its clients—corporations, unions, and health-care outfits. Merck's interest, by contrast, is to move as much medicine at the highest prices it can. "I don't see how Merck can aggressively pursue that strategy through Medco," says Erin Anderson, a marketing professor at the Wharton School who studies vertical mergers.

The folks who buy Medco's services may doubt over time if they're getting the best deals. Indeed, Medco had been urging doctors to switch from Merck's Mevacor cholesterol-reducer to Bristol-Myers Squibb Co.'s cheaper rival, Pravachol, earlier this year. But such calls stopped this spring while Merck and Medco worked on their deal, says an executive close to Medco. Medco didn't reply to questions on the Pravachol telephone calls. Merck says only that it negotiated a contract with Medco to distribute all its drugs. "We're watching very carefully," as a result of the merger, says Michael Hirsch, a benefits executive at the International Ladies' Garment Workers' Union, a Medco client.

Merck is clearly setting out for uncharted territory. In explaining the Medco deal, Vagelos has spoken of Merck's need for flexibility "and the ability to change rapidly." With the marketplace for drugs in tumult thanks to the rise of managed care, big buying groups, and deal-making distributors, Merck will have to change fast. But whether it's making the right changes is another matter.

By Joseph Weber in Philadelphia, with John Carey in Washington, Paula Dwyer in London, and Joan O'C. Hamilton in San Francisco

STRATEGIES



A BURST BUBBLE AT TOPPS

Is there life after baseball cards?

For years, Topps Co. rode the wave of the sports-card craze as it went from a $50 million market in 1980 to a $1.5 billion one in 1992. That boom in newly printed cards was largely fueled by soaring prices for classics such as Topps's 1952 Mickey Mantle, which fetched $49,500 at auction. Eager speculators bought new Topps cards by the case and stashed them away.

Alas, it was too much of a good thing. In their rush to capitalize on the boom, Topps and other sports-card manufacturers began flooding the market with dozens of card sets in the early 1990s. The result: Sales plummeted 20% last year as collectors—unsure that any of the newer cards would ever be valuable—rebelled. Profits at Topps, the market leader, tumbled 65%, to $19 million in the fiscal year ended in February, as sales fell 13%, to $263.2 million. "There has been a sea change out there," says Chief Executive Arthur T. Shorin. "This is not just a blip."

TOPPS'S NEW LINE INCLUDES COMIC BOOKS, DINOSAUR CANDY DISPENSERS, AND CARDS WITH TIE-INS TO MOVIES

Wall Street agrees: Topps's stock has fallen 35% since Jan. 1, to about 8½. And five irate shareholders sued Topps this spring, charging that through much of 1992 the company deliberately understated the weakness of its sports-card business, which accounted for two-thirds of sales, by delaying its accounting for massive returns from retailers. The suit is "absolutely baseless," Shorin says.

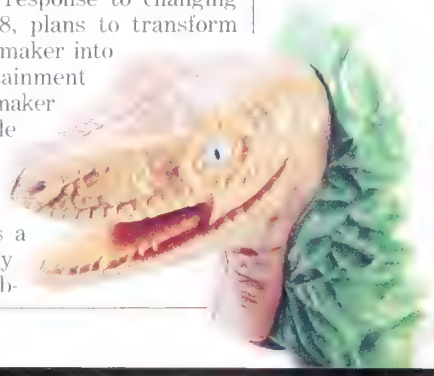
NEW HEROES. In response to changing tastes, Shorin, 58, plans to transform the baseball-card maker into a broader entertainment company. Topps, maker of Bazooka bubble gum, is marketing an expanded line of candy products, such as a Batmobile candy dispenser. It's publishing its own superhero comic books to take on giants as Marvel Entertainment Gr And just because sports cards ar selling doesn't mean Topps is abando them. It's issuing cards tied to pop movies and TV shows to appeal to

It's a risky strategy that rests on vising products that play off the la fad. Shorin recently curtailed pro tion of a new line of cards tied to *Action Hero* when the movie fizzled. when a theme strikes a chord youthful fans, the rewards can be pressive. Consider Topps's *Jurassic* products. Shorin snared licensing ri for *Jurassic Park* comic books, tra cards, and candy more than a year fore the movie became the summ blockbuster hit. Salomon Brothers analyst Jill S. Krutick expects sale Topps's dinosaur merchandise to proach $15 million this summer. a field manager for Southland Co 7-Eleven stores in California: "W blowing out of *Jurassic Park* stuff. can't get enough in."

But fads, like dinosaurs, event become extinct. That's why Shorin h longtime Marvel Comics artist Jack by to develop a new line of Topps co book and card characters, such as bast and Captain Glory, to rival Mar X-Men and Spider-Man. He is also n tiating with Propaganda Films, a of PolyGram, to produce a movie b on Bazooka Joe, who was named Shorin's father, Joseph.

Shorin's decision to deempha sports cards has brought some bene Krutick says profits could double year, to $38 million, even on flat r nue. Why? Topps won't have to w about last year's $68 million in cha and reserves for turns. But the challenge wil convincing that a '93 T could one da in the s league as a Mickey Man

By Elizab Lesly in Br lyn, N.Y.

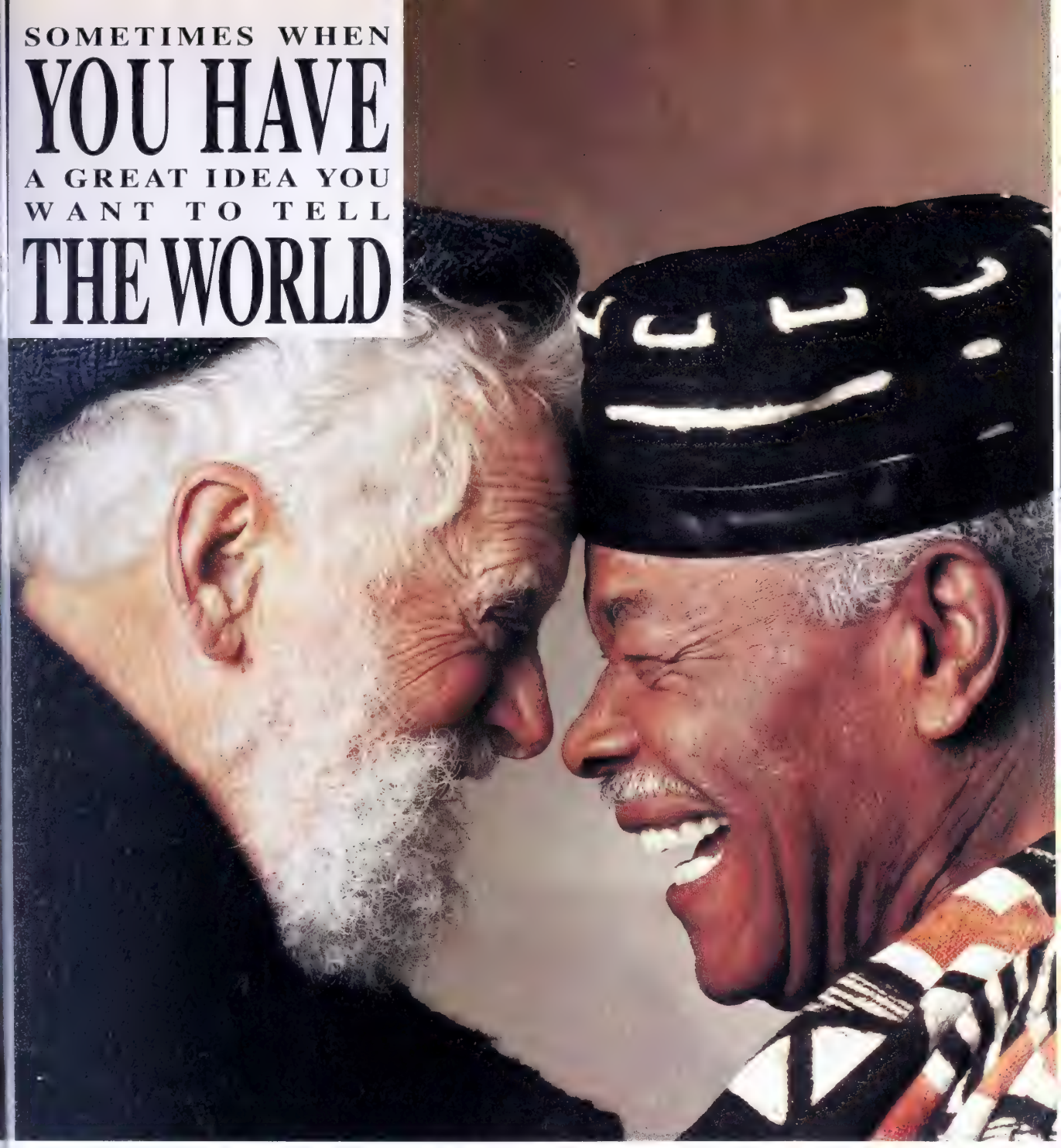


SOMETIMES WHEN

YOU HAVE

A GREAT IDEA YOU WANT TO TELL

THE WORLD



)kay, so you're not the kind of person ›ut it from the rooftops. Maybe a global more your style. An international conference, even better.

t Sprint, we grasp the concept. And ·lieve in great ideas. After all, we had gh faith in a little thing called fiber s to launch a global network back in And today we're the only communica- company to offer local, global and cellular capability. Not to mention the power to communicate with over 290 countries and locations around the world and a connection so clear you could hear a...well, you know.

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So the next time you have a great idea, don't be shy. And don't wait for someone else to bring you the technology that lets you spread the word.

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THE GREAT BUYBACK BOOM OF '93

In this era of lame interest rates, what better investment than your own stock?

Back in the 1980s, it was a defensive move. Many companies bought back big chunks of their stock—often with borrowed money—as a way to keep the shares away from unfriendly takeover types. But the demise of the dealmeisters in the early 1990s made buybacks less urgent. The recession forced Corporate America to focus on shrinking debt, not equity.

But now, an increasing number of top-drawer companies are back in the buyback game with nary a raider in sight. This time, the reasons are mainly offensive, such as boosting stock prices and earnings per share. And the new tax bill should help fuel the buyback boom.

So far this year, there have been 359 announcements of stock buybacks worth about $23.5 billion, according to Securities Data Co. That compares with 599 announcements of $35.6 billion in 1992 and only 437 worth $20.2 billion for all of 1991. Among the companies whose boards have authorized repurchases recently are H. J. Heinz, Nike, PepsiCo, Quaker Oats, Reebok International, and Wachovia.

The main reason for the buybacks is that many corporations are awash with excess cash. The collapse of interest rates has allowed them to save billions in interest expense, and the dramatic wave of layoffs has cut overhead. At the same time, the economic recovery has been so tepid that companies are wary of expansion or acquisitions—and a period of robust economic growth is just not in the cards anytime soon.

"Free cash flow is going to blossom in the next several years," says investor Kenneth S. Hackel, whose Systematic Financial Management Inc. invests in companies based on their cash flows. "Many companies will start buybacks or enhance ongoing programs. What else can they do with the money?"

Quaker Oats Co. is a case in point. Like many consumer-products companies, it has been throwing off a lot of cash and has little choice but to repurchase its shares. "We spend on new products, we make acquisitions, and we raise the dividend, and we still can't soak up all the cash," says Janet K. Cooper, Quaker's treasurer. The company has repurchased 20 million shares in the last five years and recently authorized acquisition of an additional 5 million.

Many executives say while the buyback program is a good use of their cash, it's not the first choice. "We'd er use our capital to make loans," Robert S. McCoy Jr., chief financial cer for Wachovia Corp., a bank $33.2 billion in assets that rece boosted its buyback program from 3 lion to 5 million shares. "But we're period of slow loan growth."

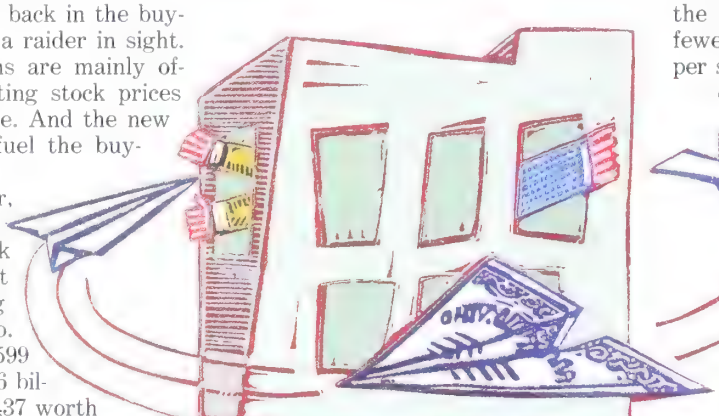
Boosting per-share earnings—and stock price—is another goal of corpo buyback strategies. If a company e the same amount of money with fewer shares outstanding, its earr per share go up 11%, and so does re on equity. And higher ROEs translate into higher s prices.

That logic been catchin even in Silicon ley, where the con tional wisdom has held that companies r ed to husband cash to l the next generation of wizar Yet high-tech luminaries such as press Semiconductor Corp. and Microsystems Inc. have initiated m buyback programs. "It reflects mar ment's belief in the strong positic the company," says Richard B. Ba Sun's treasurer, "and that position is necessarily reflected in the price o stock." Sun is trading at 27% down a a third from its all-time high.

TAX DODGE. Some analysts think th drug companies—whose shares are nearly 40% from their highs—will to step up buybacks. "They're fa slower revenue growth and higher es," says drug analyst Neil Sweig o denburg, Thalmann & Co. "They're ing to need buybacks to show growth in earnings per share."

The new tax bill is likely to qui the pace of buybacks. Tradition many companies tended to pay ou cess cash as dividends. But the ta raises the top rate on individuals' nary income—the rate at which dends are taxed—to 39.6%, while le the maximum capital-gains tax at 2

Buybacks make sense even wit the tax hike. The only shareholders



BIG-NAME BUYBACKS

BRISTOL-MYERS SQUIBB With stock hitting new lows, will be under pressure to step up buybacks. Can buy another 25 million shares.

PEPSICO Authorized buyback of up to 50 million shares, or $1.8 billion at current prices.

QUAKER OATS Retired 4.8 million shares over past year at a cost of $323 million and has the approval to buy an additional 5 million.

SUN MICROSYSTEMS Aggressive buyback program cut shares outstanding by 9% over last year. More repurchases have been O.K.'d.

WACHOVIA Large regional bank may use capital to buy back up to 5 million shares.

DATA: COMPANY REPORTS, BUSINESS WEEK

tax are those who sell at a profit. eholders who choose to hold on to shares, academic studies show, tually reap the benefit of a higher price down the line.

LAG. Companies have also found a ack can be more effective than, say, al dividends. "Special dividends are ime events," says a spokesman for izol Corp., which has bought mil- of shares since 1987 and recently orized a 4 million share repurchase, t 6% of shares outstanding. "A buy- has a more long-lasting effect."

That raises a key question about the efficacy of buyback programs designed to boost stock prices: Do they really work? By 1980s standards, the '90s buyback programs have been modest—and so has the market's reaction. "Sometimes the stock moves up a half a point, but then it goes back down," says market analyst Laszlo Birinyi of Birinyi Associates. In part, that's because it can take months or years before a buyback plan is executed—and a company has no obligation to do so. And not all the shares repurchased are retired. Microsoft Corp., for instance, is buying shares—about 3 million so far—mostly for employee stock purchases and stock-option plans. And some buy shares for dividend-reinvestment programs.

Still, even if a company executes only a portion of its repurchase plan, what's important is that it stands ready to buy more stock. "It tells you the company cares about its shareholders," says Birinyi. That's the kind of company to invest in.

By Jeffrey M. Laderman in New York, with bureau reports

TS

AN A SUPERTHRIFT URVIVE ON SAFETY?

anson's back-to-basics ethos may not play in years to come

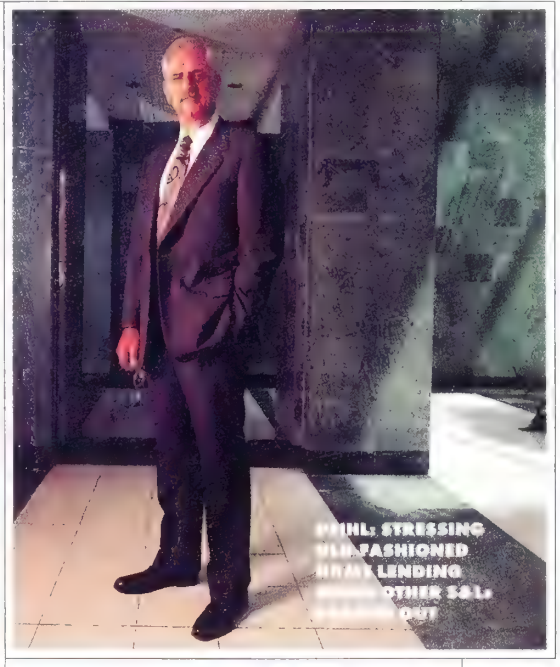
ust driving out to H. F. Ahmanson & Co.'s Southern California headquarters speaks volumes about the gs and loan. The nation's largest is located not in the glitz and our of Beverly Hills, but in Irwin- one freeway exit away from grav- s and a Miller brewery. That suits rd H. Deihl, 64, Ahmanson's chair- and chief executive, just fine. "You e a pure-vanilla savings and loan as as you do it efficiently," he says.

ter some costly 1980s misadven- , Deihl, who retires at the end of ear, is returning the 104-year-old any to its roots as a home lender. powerful recipe these days, as thrifts go back to basics and post t profits. "There has been a real round in the industry," says Jona- L. Fiechter, acting director of the of Thrift Supervision.

at strategy may not work forever: ole higher short-term interest rates more competition from mortgage ers and perhaps superregional or y-center banks could spoil the . While other thrifts gear up, Ah- on is sticking with its old formula.

L POTATOES. Ahmanson strayed plain vanilla when it joined other s during the past decade to dabble mmercial real estate. Ahmanson t badly burned: It lost $161 mil- n the development business over years and wrote off that much in commercial real estate loans— potatoes compared with many oth- rifts—but Deihl still vowed to re- o home lending.

now, it's working. Ahmanson's ential-lending profits and enviable l levels, $2.7 billion last year, were strong enough to allow it to take an estimated 30% haircut on $1.2 billion worth of soured California home loans, which it sold to Bear, Stearns & Co. And Wall Street is clearly happy with Ahmanson: On July 30, the $49 billion company raised $287 million in new capital by selling convertible preferred stock. Investors were clamoring for more.



DEIHL: STRESSING OLD-FASHIONED HOME LENDING AMID OTHER S&Ls BAILING OUT

Still, there are long-term risks in Ahmanson's approach. It has been enjoying fat net-interest margins, as its borrowing rates have fallen faster than the adjustable rates on its mortgages. But profit margins could erode if short-term rates rise and its borrowing rates tick up faster than its mortgages. Ahmanson's margin will shrink to 2.90% by the end of 1994, down from the current 3.13%, predicts analyst Thomas O'Donnell of Prudential Securities Inc.

Ahmanson is also vulnerable to competitors. Superregional and money-center banks could invade the Golden State if Congress allows interstate banking. And brawny mortgage bankers such as Countrywide Credit Industries Inc. have already cornered half the market for mortgage originations. What's more, since the mortgage bankers don't have big branch systems and don't pay deposit insurance, they can often offer origination packages at lower rates than thrifts such as Ahmanson. And they stand to make big inroads in adjustable-rate mortgages, if they should become popular again when interest rates rise.

Deihl is aware of the competitive pressures. He's shopping for acquisitions in California, Florida, and New York, hoping to expand his base of loans to boost operating efficiency. News reports had Ahmanson holding preliminary discussions with troubled $16 billion CalFed Inc. last May. A spokesman for CalFed declined to comment. Smaller California thrifts such as Fidelity Federal Bank are also on the market.

But while Ahmanson concentrates on old-fashioned home lending, other thrifts are branching out. Up north, Washington Mutual Savings Bank is planning to offer customers everything from mutual funds to boat loans. And closer to home, CEO Stephen J. Trafton of Glenfed Inc. says thrifts must get into businesses such as tax preparation and planning to avoid being hurt by shrinking lending spreads.

Thrifts have stumbled getting into new businesses in the past. But some prudent diversification may be mandatory to allow thrifts to keep up with changing consumer preferences. Deihl and Ahmanson may find they have to change to avoid getting left behind in the gravel pits.

By Amy Barrett in Irwindale, Calif.

BY GENE G. MARCIAL

THREE LARGE CAPS TO CONSIDER IN UNCERTAIN TIMES

Stanley Nabi has seen all kinds of market surprises, having been around the Street for nearly 40 years—first as a broker-analyst and later as research and investment chief at Lazard Frères. Now a chief economist and investment strategist at Bessemer Trust, Nabi sees no big surprises. He predicts the market will neither surge nor collapse. True, the economy has been tepid, but corporate earnings have been reasonably decent amid depressed interest rates and stable inflation, explains Nabi. The only way to make money in this market, he asserts, is to pick stocks—smartly.

He has a penchant for companies distinguished by strong growth, low price-earnings ratios, and unrecognized values. And he prefers the big-money, large-cap stocks for Bessemer's $10 billion portfolio.

One of his favorites is Morgan Stanley, a major Wall Street firm that's been profitable in the highly risky securities and investment business. Morgan's global presence, says Nabi, will benefit from the corporate restructuring that he sees coming in Europe.

IN THE LAB. So far, Morgan has been topping analysts' expectations, and Nabi has had to boost his own estimates for this year, to $7 a share from $6.25. Morgan earned $5.93 in 1992. Next year, he expects $7.75. Currently at 74, the stock trades at less than twice its book value of $44.50 a share. Nabi thinks it deserves to trade at 3 times book, and he believes Morgan's p-e of 10 is cheap.

Tyco Laboratories is a stock Nabi started buying when it came under pressure recently. A diversified manufacturing company, Tyco tumbled from 47 a share in March to 38 in late July. The drop has pushed down its p-e to 13 times Nabi's estimated 1994 earnings—way below its historical ratio of 17. The stock has edged up to 41. Poor sales this year of its fire-protection systems in Europe have offset gains in the U. S. But Nabi sees U. S. sales firing up soon because of an upturn in home and building construction. Tyco also makes fiber-optic telecommunications cables that he expects will be a big source of profits. Nabi estimates Tyco earned $2.30 in the year ended June 30, 1993,

NABI: HE'S BULLISH ON THE CONSUMER

vs. 1992's $2.06. In 1994, he expects $2.75.

Nabi is also high on May Department Stores. The stock hit a new high of 42 on Aug. 9 after reporting a 22% rise in second-quarter earnings. Unlike most analysts, says Nabi, "I'm not bearish on the consumer." So he thinks May, a retailer with 303 department stores in 29 states and a nationwide chain of 3,500 shoe stores, will surprise the street with even bigger gains when the economy revs up. Nabi sees earnings rising to $2.70 in the year ending Jan. 31, 1994, and to $3 in 1995, vs. $2.26 a year ago.

THE SUM OF MEDIQ'S PARTS

Health-care companies aren't too hot these days, but some pros are snapping up Mediq shares. Why? A few investors believe President and CEO Bernard Korman will continue to sell Mediq assets, which they figure are worth a lot more than the stock's current price of 4.

Mediq rents out life-support equipment, such as infusion pumps and portable X-rays, to 3,500 hospitals, nursing homes, and home health-care providers. "The value of Mediq's various assets are worth a combined $9 to $10 a share," says a New York manager who has accumulated nearly 4% of Mediq's stock. He expects that in two years, when Korman completes plans to enhance shareholder value, Mediq's stock will have hit about 13 a share.

Korman says that, indeed, is his objective. "We will continue to monetize the value of Mediq's various pieces," he says. "We're trying to identify t value of the assets to be able to g the full value of our stock," Korm explains. Mediq's next move will be t tax-free spin-off of the shares of mental-health management unit.

Money manager Charlie Ganz no that, fundamentally, Mediq has turn around after a loss two years ago. earned 27¢ a share in 1992, and t year, Ganz sees the company toppi that number. But Mediq's assets the reason to own the stock, he ad They include a 49% stake in NutraM Products, a health-care-products co pany, believed worth $2 a share in M diq stock, and a 46% stake in PCI S vices, a pharmaceutical packagi company, also worth $2. Mediq's di nostic-imaging services unit is valu at $2.50, its PRN life-support division $3, and the mental-health unit at $1

WOULD YOU BUY A USED-CAR STOCK?

Would you buy the shares o used-car dealer? Most peo wouldn't. Yet some big vestors have bought into Solar Fin cial Services, an operator of used- dealerships in Miami. One investor Orlando-based National Heritage L Insurance, which plunked down $5 n lion in July for a 5% stake in Solar.

What's the deal? "Solar isn't one your average used-car dealers," sa Norbert Hochschartner, managi partner at Equity Communicatio Group, a research firm in Bedfo N. H. Solar considers itself more o financing company that also offers surance and repair services. Its grow has been rapid: Sales are expected jump to $28 million in the year endi May 31, 1994, vs. an estimated $19 n lion in fiscal 1993, says Hochschartn He expects earnings of 53¢ next ye up from an estimated 36¢ in fiscal 19

Hochschartner points out that So President Dave Pavsner uses conser tive accounting by reflecting prof from a sale over the number of mont of the sales contract.

Pavsner says two new operatic should add to earnings: A new-car le ing business to be launched in Septe ber and a salvage yard that will trieve and recondition parts fr wrecked vehicles. Hochschartner f ures that Solar's stock, now at 4 share, is undervalued compared w shares of other financing compani He thinks the company is worth 1 share.

ACKS

JMP, PUMP, PUMP SCHWINN

company has new owners and a new focus on mountain bikes

racer in skin-tight pants, muscles bulging, leaps through the air on a n mountain bicycle. "No , no glory," screams the ich will appear this fall in *ing, American Bicyclist,* her magazines. It urges to "send a message."

message might be: n is back. "We're telling orld we've reestablished n," says Ralph Day Mur- esident and chief operat- icer. "The ads have an at- " That's a switch from the hwinn, which, instead of tude, had an attitude prob- ne that almost sent the amous name in U. S. bikes riding the sunset.

winn's new slogan is "Established Re-established 1994." In January, hilmark Fund LP, an investor and ski-accessory manufacturer USA, which also makes mountain or Europe and Asia, formed Scott Group and acquired Schwinn for llion. They invested an additional ion into a downsized Schwinn and ll will move it from Chicago to azy Boulder, Colo. The move is rful," says William H. Fields, a -company consultant in Peoria, It's a sign to the bicycle world s a new game."

ALERT. It's also a sign that n has gotten serious about moun- kes, which now account for about 70% of all bikes sold in the U. S. nountain bikers learned to ride on ns with such nifty features as buzzer horns. That was back in 30s, when Schwinn rode circles its competition, manufacturing t of every four bikes sold in the n the past few years, Schwinn en a downhill racer, watching op from 1 million bikes in 1987 to more than 500,000 in 1991 and s as few as 275,000 this year.

ne old days, buying anything but inn seemed almost un-American. Reagan was once featured in a n advertisement, and *Captain Kangaroo* was sponsored by Schwinn. Founded in 1895 by Ignaz Schwinn, a German who immigrated to Chicago, the company was managed by his descendants until last year.

By then, it had run into quality and delivery problems after switching to overseas suppliers. But more serious was Schwinn's attitude problem. "When they were asked who were their competition, they said, 'We don't have competition. We're Schwinn,'" says Tom Stendahl, Scott's chief executive.

As it turned out, Schwinn had a pack of savvy rivals. Huffy Corp. and Murray Inc. took over the low-end, mass-merchandise market, where almost 70% of today's bikes are sold. Newcomers Trek, Giant, and Specialized became the leaders in mountain bikes, which Schwinn decided were just a fad. "They didn't talk to Generation X the way other companies did," says Chuck McCullagh, editor and publisher of *Bicycling* and *Mountain Bike* magazines.

All that led to some $50 million in losses since 1989, and last year, Schwinn filed for Chapter 11. But oh, what a difference a year can make. Schwinn now appears to be in high gear. It won't disclose projections but says it will make its first profit since 1989, even though lower volume could mean sales of less than last year's $150 million.

FAITH HEALING. If Schwinn can get back up to 20% or so of the specialty-bike market by 2000, which Fields suggests is possible, much of the credit will go to Schwinn's loyal dealers. "We didn't lose share of heart but share of mind," says Murray, explaining that delivery problems forced many dealers to give floor space to competing brands. To recapture that space and reassure dealers, the new management flew around the U. S. last winter, meeting with 800 of its 1,400 dealers, who sell 80% of Schwinn's bikes. Those meetings turned many skeptical dealers into believers. Asked if Schwinn can come back, Michael W. Koch, a Buffalo Grove (Ill.) dealer says: "Chrysler did it, didn't they?"

Now, Schwinn must convince the million or so fanatics who ride 25 to 100 miles a week to buy its $250 to $2,500 bikes. They're a small part of the market, but they have enormous influence on the 10 million serious and casual riders who buy bikes at specialty shops. And they won't be easily swayed.

Denverite Michael W. Busher, 28, learned to ride on a purple Schwinn with a banana-seat and now pedals his Cannondale more than 50 miles a week. "Schwinn used to be the only bike I'd look at," he says. "[Now,] I don't even know where a Schwinn bike store is."

To capture cyclists such as Busher, Schwinn is doubling its ad budget, to about $10 million, and is sponsoring a three-member professional mountain-bike team that has already caught the attention of enthusiasts. At the World Cup in Vail, Colo., this summer, the trio placed in the top 15 among 74 racers. Says Charles T. Ferries, Scott's chairman: "I was up on the hill and could hear somebody say, 'My God, there goes another Schwinn rider.'"

Encouraging words to a man whose company is facing a long climb back.

By Sandra D. Atchison in Chicago

HART BY USA MOUSE BPA MANY BW

MUSIC

NOW EMI IS REALLY ROCKING

Marketer Jim Fifield's buying spree has made it a powerhouse

Jim Fifield loves rhythm and blues. The president of EMI Music fairly bubbles with enthusiasm when he plays you his old Freddie King records. Sit with him at a Tina Turner concert, though, and Fifield seems oddly out of place. Clad in white slacks and seated quietly in the 10th row of New York's Radio City Music Hall, Fifield looks like an affable suburbanite who bought tickets to see the Rockettes and wandered into the wrong show.

Both images have served James G. Fifield well as he turns EMI Music from an also-ran into a powerful worldwide record company. One moment, he's the plain-vanilla marketer who spent 20 years at General Mills Inc. Next moment, he's the music junkie who jets off to the Montreux Jazz Festival in Switzerland and schmoozes backstage with Turner and other EMI stars. Says Fifield: "I love the daytime part of the job and the nighttime part."

What's not to love? EMI recently reported record financial results for fiscal 1993. And rivals credit Fifield with catapulting his company into the front rank of worldwide players. With 15% of the global market, EMI is just slightly behind the industry's Big Three: Time Warner, Sony Music Entertainment, and PolyGram. "Jim has done a very good job of turning around his international company, which was sort of complacent," says PolyGram CEO Alain Levy.

That's putting it mildly. When British conglomerate Thorn EMI recruited Fifield to run its New York-based music subsidiary in 1988, the company was downright doddering. EMI's flagship label, Capitol Records, once recorded the Beatles and Frank Sinatra. But by the 1980s, Capitol had become as artistically outdated as its Los Angeles headquarters, which is shaped like a stack of LPs. "EMI's reputation was almost nonexistent—maybe that of a sleeping giant," says Shep Gordon, who manages Luther Vandross. EMI wasn't even so giant anymore, what with Sony and Bertels assembling music empires.

Enter Fifield, who persuaded his ish bosses to embark on an aggre acquisition spree (table). In short he plunked down $418 million for independent label, Chrysalis, and Entertainment World, a music publ that owns and markets thousan songs. Then, in 1992, Fifield mad brashest move, edging out Bertels and MCA to buy Virgin Music Grou a cool $960 million. The last of the independent labels, Virgin brought stars as Janet Jackson and the R Stones under the EMI umbrella.

SO FAR, SO GOOD. But many recor ecutives thought Fifield had reckl overpaid. While it's premature t that he has repudiated those critics ly indications are promising. Virgin erated $77 million in profit for the 10 months of fiscal That compares with $25 million in its las year as an indepen Fifield squeezed out profits in two ways: he and Virgin CEO Berry slashed costs ing off 450 of Virgin's employees and cuttin bloated artist rost half. Second, EMI r tured profits that us go to other companie distributing Virgin's outside Europe.

Virgin lifted EMI's all income 57%, to million, on revenues o billion. Excluding the gin acquisition, p were still up 14.9%. important, the comp return on sales rose 11% to 13%. Fifield's is to boost EMI's marg 16%, in line with tho PolyGram and Warner sic Group. The troub he can't squeeze any easy growth out of ac tions or consolidatin bels such as Virgin now, Fifield must gr with EMI's remaining ness: its artistic reput in America.

Capitol and EMI's U. S. labels do boast genuine stars—countr lossus Garth Brooks rap group Arrested D opment among them. farther down EMI's r you come across such

FIFIELD WITH TINA TURNER IN NEW YORK: MORE FOCUS ON THE U.S.

WHISTLING A COSTLY TUNE

EMI's key acquisitions/ Major artists or songs	Price Millions of dollars	Date acquired
VIRGIN MUSIC GROUP Janet Jackson, Genesis, Lenny Kravitz, UB40	$960	1992
SBK ENTERTAINMENT WORLD* Singin' in the Rain, Pink Panther theme	$297	1989
CHRYSALIS RECORDS Sinead O'Connor, Arrested Development	$121	1989
SBK RECORDS Wilson Phillips, Jon Secada	$26**	1989

*Music publishing company
**Down payment on 50% stake that EMI doesn't already own; total payment could be more than $100 million

DATA: COMPANY REPORTS, BUSINESS WEEK

es as the Smithereens and Televi-
as a result, EMI's domestic market
of 11.2% lags behind all major re-
companies except MCA. Concedes
"Everything we've accomplished
is without North America coming
ny standard."
ejuvenate Capitol and the other
Fifield recently named Charles
man CEO of EMI North America.
ulous showman who chomps on a
cigar, Koppelman launched SBK
s in partnership with EMI in 1989.
op trio Wilson Phillips as one of
t acts, the label got off to a spec-
start. Yet rival executives are
ecause Koppelman has no experi-
nning such a large company: "It's
move," says Irving Azoff, owner
it Records.
pelman is already making waves
tol. He recently replaced its pres-
fired 60 employees, and trimmed
st roster. Fifield takes pride in
plenty of latitude to creative
such as Koppelman. While they
ith the likes of Tina Turner or
Brooks, he tends to the more pro-
arketing and distribution side.
ork is second nature to Fifield:
joining EMI, he ran the toy busi-
General Mills and the CBS/Fox
enture in home videos.

EGOS. Along the way, say col-
, Fifield has also learned how to
droitly with the tender egos of
ners. In negotiating record deals,
mple, he is considered tough but
ght: "Very often in the record
ss, yes means maybe and maybe
no," observes Allen Grubman, a
ul entertainment lawyer. "With
s means yes and no means no."
on the topic of EMI's long-term
ts does Fifield become a bit elu-
e agrees that EMI Music has no
y with the appliance-rental busi-
at is Thorn's other major sub-
And he acknowledges that many
analysts expect Thorn Chairman
in Southgate to sell off EMI, since
already divested everything from
ppliances to a stake in a broad-
franchise. The last spate of ru-
ad Thorn talking with Paramount
nications about restructuring EMI
as a joint venture.
Fifield claims he never thinks
omeday working for an American
ompany instead of a British con-
ate. And Southgate insists that
ig up Thorn EMI is "not high on
enda." If Southgate ever has a
of heart, though, Fifield better
e gets to go with EMI Music. He's
ely to find as fun a job, daytime
t, anytime soon.

Mark Landler in New York, with
lynn in London and Ronald Grover
Angeles

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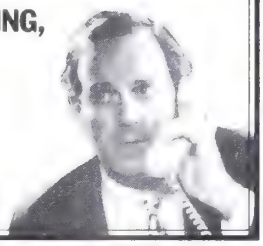

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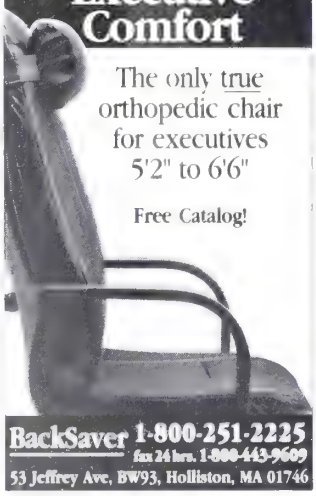

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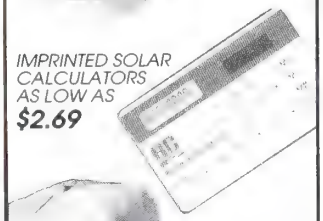

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EDITED BY AMY DUNKIN

Taxes

TACTICS FOR THE NEW TAX HIKES

If you haven't yet figured out whether you will owe more income taxes under President Clinton's new budget, try looking at it this way: If you and your spouse do not make at least $180,000 a year, you don't have to worry about higher rates. The new 36% levy kicks in at $140,000 of "taxable income" for couples—that's minus about $40,000 in deductions and exemptions that folks at these levels can usually subtract. To reach the top stated marginal rate of 39.6% at $250,000 in taxable income, you would probably have to earn over $300,000 a year.

Many tax professionals do not subscribe to the dire predictions of some Republicans. Except for high-income individuals and high-income corporations, the consequences aren't that severe, says Eileen O'Connor, senior tax manager at Grant Thornton's office of federal tax services. You can no longer deduct private club dues, your medical payroll tax might go up, and business meals will be only 50%—instead of 80%—deductible. But this doesn't come close to the havoc the loophole-closing 1986 Tax Reform Bill wreaked on many upper-income taxpayers.

Of course, there is one group—not necessarily classified as affluent—that will feel a bigger bite. Married retirees who earn more than $44,000 a year ($34,000 for single filers) will have to pay taxes on 85% of their Social Security benefits in 1994. The old law taxed only 50% of Social Security for couples and individuals with income above $32,000 and $25,000, respectively.

LOST CHANCE. For those of you who will pay more taxes next year, there is not a lot you can do to minimize the additional burden. Most o long-term strategies su ed by financial planne tax advisers are thing should have been doin way: investing in ta bonds and making use deferred retirement pro Take advantage of fl spending accounts offer some employers to p child care and medical e es in pretax dollars. Co purchasing tax-favored rance products, such as ities. As for short-term egies, since the tax is active to Jan. 1, 1993, t portunity to save big by

:ome into this year—on eory it will be taxed at rates—is gone.

tax experts have been bling to come up with to shave at least a few ; off their clients' bills. romising area could pro- ome respite to taxpay- ırning in the range of 00 to $300,000, the lev- which many of the new kick in. Traditional fi- l planning wisdom has t one should defer in- and deduct as much as e to pay as little as you taxes each year. Now, ne taxpayers, it may be er to bring on income fer the deductions, says e E. L. Barbee, execu- rector of client services ce Waterhouse. A new tax preparation has be- ıat he calls "threshold ng."

first step is to figure w much you owe and ıt a few maneuvers. out running the num- you can't tell whether g money around be- thresholds makes says Barbee. For ex- . if you are self-em- and earn more than 00 from your business, ill have to pay 2.9% of ntire earnings for the ıl payroll tax in 1994. d law only required tax first $135,000 of earn- So instead of deferring until 1994, you might o move income into this "If you are self-em- , collect on bills soon- t more orders in this says Steve Corrick, a rtner at Arthur Ander- Save deductions until But if you are right on 35,000 threshold, you still be better off de- g income—despite the onal medical payroll you're not subject to % rate.

reason it is important ke the calculations is ıany of the thresholds into play on different n your tax forms. For le, couples with chil- begin to lose some of nefit of deductions once ted gross income" (before deductions and exemptions) gets above $108,450. But exemptions don't begin to phase out until "taxable income" (after deductions and exemptions) gets above $162,700. Both these pieces have been in place for a while, but the new legislation makes them permanent. Comparing the phaseouts "is like comparing apples and oranges and bananas," says Barbee.

STAY CLEAR. Families may be able to avoid losing the benefits of deductions and exemptions by shifting some income into another year, at least putting off the tax bite for next year. But the most important tax to avoid is the alternative minimum tax (AMT), says Barbee. This tax disallows many itemized deductions so the wealthy can't avoid paying their fair share in taxes. It is determined by a complicated formula rather than an income threshold. Under the new laws, it rises to 26% or 28% from 24% now. "It is truly a calculation that someone has to make," Barbee says. "If you are close to it, you might be able to work your way out of it with good tax planning."

It may be smarter to bring on the income now and defer the deductions

Under the new laws, the spread between capital gains and ordinary income taxes is much wider. Now, you could be taxed 39.6% on income, but only 28% on capital gains. "A 3% spread is not terribly interesting," says Barbee. "But an 11.6% spread is."

If you can tolerate additional risk in your portfolio, you may want to transfer money from cash and bonds (which generate income) into stocks and real estate (which produce capital gains). Also, even if you're worried about a correction in the stock market, consider holding on to stocks for a full year so they will be taxed as long-term capital gains when you sell.

■ Get a luxury tax refund. The three-year-old 10% surtax on yachts, furs, jewelry, and private aircraft above a certain price was repealed, effective Jan. 1, 1993. If you made such a purchase in the past eight months, you are due a refund on the extra tax.

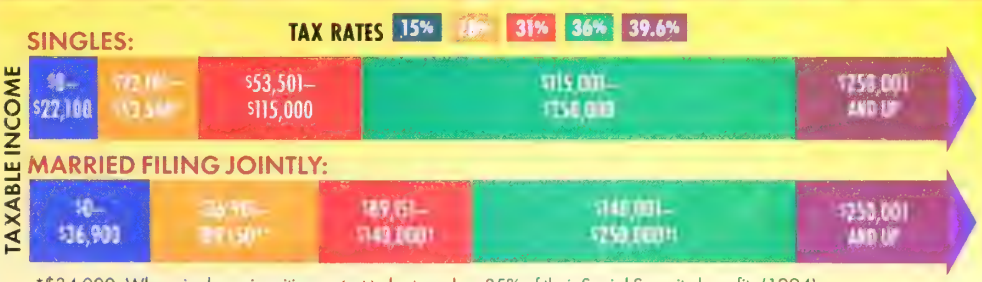
■ Donate to charity such assets as stocks, bonds, artworks, collectibles, real estate, and other property that has appreciated. The new law makes permanent a provision allowing you to deduct the fair market value of appreciated property, without having to worry about triggering the AMT. This provision is retroactive to June 30, 1992, for "tangible personal property," such as artwork and collectibles. If you made a generous gift in the last year, consider filing an amended return.

■ Qualify for a 50% capital-gains exclusion if you buy newly issued stock in a business with less than $50 million in total capitalization and hold it for at least five years. The applications for this new tax break are unclear, but tax pros will probably figure out a way to take advantage of it. Some tax pros question whether individuals will ever want to take on so much risk just to save on capital gains. "We kind of suspect that this is not going to catch fire real quickly," says Corrick.

How far will you go to reduce your tax burden? If you rent, buying a house would qualify you for a big mortgage interest deduction. Or, by forgoing marriage, you could avoid the "marriage penalty" that kicks you into a higher tax bracket.

But tax experts warn clients against running their lives simply to avoid taxes. "When tax rates drive decision-making, we tend to get people who make a lot of foolish short-term decisions," observes Joel Isaacson, a New York financial planner. Still, he says, if you are planning on getting married, you might want to wait until 1994 to tie the knot. It could save you some cash for your honeymoon. *Amey Stone*

THE BITE IN THE TAX PLAN



*$34,000–When single senior citizens start to be taxed on 85% of their Social Security benefits (1994)
**$44,000–When married senior citizens filing jointly start to get taxed on 85% of their Social Security benefits (1994)
†$108,450–When deduction phaseouts begin
††$162,700–When exemption phaseouts begin

DATA: BUSINESS WEEK

Tax experts are also scrutinizing new laws intended to stimulate business by giving consumers and investors a tax break. The applications are not clear yet, but don't be surprised if your adviser suggests you do the following:

■ Seek out capital gains. When the top marginal rate was 31%, high earners could save 3% by shifting income into accounts that produced capital gains taxed at 28%.

Gadgets

KEEPING YOUR HEART IN THE RIGHT PLACE

Once dismissed as expensive toys for all but serious athletes, heart-rate monitors are gaining respect as an efficient way for time-pressed fitness buffs to get the most out of their workouts. Monitors tell you at a glance whether your heartbeat is in the target range—60% to 80% of your maximum capacity—to reap overall cardiac benefit, while minimizing time wasted by exercising at rates providing little or no benefit.

STRESS ALERT. A monitor's main advantage may well be to warn weekend athletes when their heart rates exceed the proper fitness range, which for the out of shape can be surprisingly low—merely a slow jog. Indeed, great numbers of fitness wannabes overexert themselves in the mistaken belief that they will achieve fitness that much sooner. In truth, they gain little while risking injury and burnout before flopping back on the couch in frustration.

Monitors are easy to operate. The best have a band strapped across the chest that electronically signals a wristwatch that displays your pulse, along with such options as high and low target settings, workout time within the target range, time spent above and below, lap times, average heart rate per lap, and length of workout.

First, determine your maximum heart rate by subtracting your age from 220, for a rough measure, or by a stress test. Then, program target settings representing your optimum workout range. For a 40-year-old man in peak condition, the top setting might be 144 beats per minute for 80% max—the top range of aerobic conditioning—with a low setting of 108, for 60%

As the workout progresses, a beeper signals when you're above or below the target settings. What matters is not how many miles you run or swim but the heart's performance [illegible] time—idea[illegible] minutes in[illegible] bic range [illegible] times a w[illegible]

A good [illegible] tor doesn't [illegible] to cost a[illegible] tune. For [illegible] Polar Edge [illegible] you pulse, high [illegible] low alarms, and [illegible] above the low se[illegible] Vetta's wireless heart [illegible] itor and bike com[illegible] ($100) offers similar ba[illegible]

BY MAIL. You can find [illegible] monitors at sporting [illegible] stores and in bi[illegible] equipment catalogs, su[illegible] Performance (800 727-[illegible] Another mail-order c[illegible] Creative Health Product[illegible] 742-4478), offers a [illegible] pamphlet about them.

What about the old [illegible] at the throat? It's not [illegible] accurate; your pulse fal[illegible] quickly once you stop to [illegible] precise reading. Besides [illegible] don't get to pore throu[illegible] manual and fiddle with [illegible] gramming when you s[illegible] be on the track. *E. S*

Smart Money

LIFE INSURANCE STOCKS: ALIVE AND, YES, WELL

Buying life insurance is a long-term proposition. You have to wait years until a policy's cash value builds up enough to turn the purchase into a worthwhile investment. Likewise, those who bought shares in life-insurance companies have needed a bit of patience. The stocks took a dive during the 1991 collapse of several major carriers, rallied the following year, then dipped again during this past spring's inflation scare, which menaced insurer bond portfolios.

But earnings prospects for the industry are favorable. Salomon Brothers forecasts 10% to 12% yearly earnings increases this year and next. The chief reason is demographic. The aging baby-boom population is thinking about retirement, so annuity sales are soaring. Annuity premiums were 21% of the industry's total last year, up six points from 1988, according to A. M. Best, the insurance rating firm.

On top of that, the industry is considerably more stable financially than in the dark days of 1991, when such carriers as Executive Life and Mutual Benefit collapsed. Nowadays, life insurers have beefed up their capital and shed riskier assets, such as junk bonds.

What are the good buys? Equitable, despite lingering real estate woes that threatened its existence two years ago, has survived thanks to the deep pockets of its 49% owner, French insurance giant Axa. Sales of life and annuity policies are hot, and its investment subsidiaries—Donaldson, Lufkin & Jenrette and Alliance Capital—are romping on Wall Street. After running huge losses for the past two years, it's back in the black and should keep on surging: Salomon analysts expect Equitable's earnings per share to jump from $0.22 in 199[illegible] $1 this year and $1.5[illegible] 1994. Equitable of Iowa [illegible] relation) has prospered [illegible] cause it avoided 1980s fo[illegible] into risky real estate in[illegible] ments. Ditto for Ca[illegible] Holding.

THE PRICE IS RIGHT. The [illegible] beauty of life-insur[illegible] stocks is that they're c[illegible] relative to the broader [illegible] ket. That's the result of [illegible] placed worries about [illegible] problems and future inte[illegible] rate volatility, which wou[illegible] have as great an impac[illegible] portfolios as some fear[illegible] surers nowadays are a[illegible] at hedging and other so[illegible] ticated tactics. The p[illegible] earnings ratio for life co[illegible] nies is 12, vs. 23 for [illegible] Standard & Poor's 500-s[illegible] index. Says Goldman S[illegible] analyst Joan Zief: "The[illegible] room for appreciation."

If that's true, buying [illegible] insurance stock may b[illegible] better, albeit riskier, inv[illegible] ment than a stodgy old w[illegible] life policy. *Larry L*

INSURERS TO LOOK AT

Company	Stock price 8/9/93	Price/earnings*	Est. 1993 earnings-per-share growth
AMERICAN GENERAL	31⅝	12	12.0%
CAPITAL HOLDING	43⅜	13	10.0
EQUITABLE	20⅛	NA	354.0
EQUITABLE OF IOWA	32¼	13	19.2
UNUM	58⅝	15	13.4

*12-month trailing earnings as of Aug. 9, 1993 NA=Not Applicable

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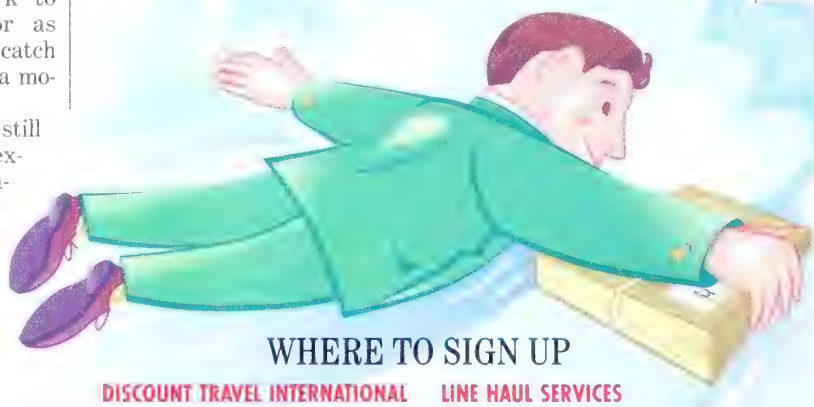

Mention of air couriers probably makes you think of students or retirees awaiting a phone call to hop a last-minute flight. Sure, in exchange for accompanying packages overseas, they get round-trip tickets from New York to London or Madrid for as cheap as $99. But the catch is they have to leave at a moment's notice.

While the best deals still go to those with ultraflexible schedules, international air-courier flights are becoming an increasingly attractive option for travelers who prefer planning ahead. Round-trip flights booked two to three months in advance are typically 50% off excursion fares in coach class on major commercial airlines, with frequent-flier miles usually available. (Discounts deepen as the flight date approaches.) And because of a growing need for air couriers as overnight mail delivery catches on globally, there are more destinations to choose from—including Eastern Europe—and more cities to leave from than just a year ago. About 24,000 courier tickets will be sold this year in the U. S., twice as many as five years ago. Typically, only one courier is needed per flight, and all tickets are round-trip. Also, no flights are available to destinations within the U. S.

QUICK CLEARANCE. You still can't take any checked luggage on most flights. But that drawback is now easier than ever to get around. Savvy couriers figured out long ago the solution is to travel with a spouse or a friend who purchases a regular ticket and agrees to share the baggage allotment. But coordination was often difficult, especially with last-minute flights. Recently, however, several courier companies added in-house travel agencies to book flights on courier routes for companions at competitive rates. They include the largest courier company in the U. S., Halbart Express, based in Jamaica, N.Y., and Line Haul Services in Miami.

These companies will also make hotel reservations for couriers, and Line Haul, which flies to Central and South America, will arrange car rentals. "We are trying to make the experience of flying as an air courier as friendly as possible," says Jack Schaper, director of audit and development at Halbart.

A WEEK IN RIO? Also new are package deals, offered by Discount Travel International in New York and Miami. This travel agency specializing in courier flights offers a stay at a mountain resort with a health spa and golf course, two hours from Mexico City, for $50 a day per person double-occupancy, a third off the regular price. The round-trip courier fare from Miami to Mexico City is $150, and $250 from New York—61% and 46% less than the regular price. Meanwhile, a week at a hotel in Rio de Janeiro, including breakfast, is $250 per person, with round-trip airfare for the courier of $499 from Miami, vs. the regular excursion fare of $1,186.

Shipping companies need couriers because their pouches, filled with ca checks and other docu clear customs more qui passenger luggage tha go freight. Couriers m rive at the airport t three hours before the to pick up their They are usual sponsible for ca customs papers giving them on to a shipping-co clerk who take cargo through cu Similarly, they ge return ticket a airport on the they are leaving routes require a stay of one t weeks, but a gr number, incl those to Easter rope and some kyo, Hong Kong Singapore, offer op turns of up to 30 da

SAME ALLURE. Most c flights depart from New Miami, Los Angeles, an Francisco. A smatteri flights leave from Chica Houston, and a few b available from Bosto Washington in late 199 lanta and Detroit are e ed to join their ranks by end. For those who don near hub cities, it's imp to comparison-price sho cost of a direct ticket to eign destination may b expensive than the pr flying to a hub city an boarding a courier fligh

The International As tion of Air Travel Couri Lake Worth, Fla. (407 8320), publishes a bim newsletter listing c flights, with daily updat fax, for $35 annually. *T siders Guide to Air C Bargains* by Kelly Mon ($14.95; Inwood Training lications) includes a dire of companies offering c flights.

While it is easier t as a courier than ever b the allure remains the bargain airfares. An any smart traveler k saving on getting there you to splurge once y arrived. *Susan Sch*

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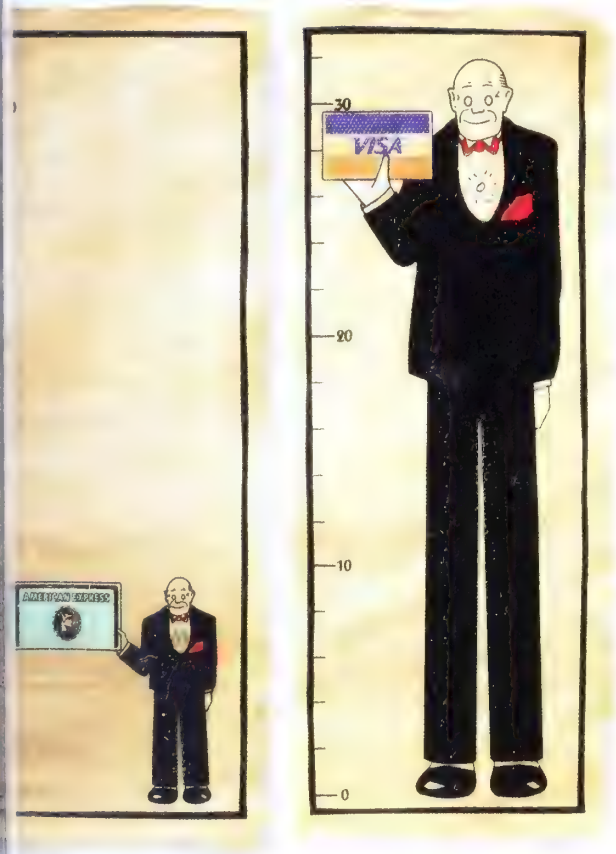
DATA: BUSINESS WEEK

Worth Noting

■ **INSURANCE PRIMER.** *Life Insurance from the Buyer's Point of View* explains policies, settlement options, tax considerations, and rankings in simple, nontechnical terms. Order the 108-page booklet by sending an $8 check to the American Institute for Economic Research, Great Barrington, Mass. 01230. Or call 413 528-1216 for information.

■ **CANCER TEST.** Get a free screening for prostate cancer during Prostate Cancer Awareness Week, Sept. 20-30. To find out which of the 1,000 testing sites are near you, call 800 227-2345. The appointments are limited and will be filled on a first-come, first-served basis. Tests take about one minute to perform.

/hy cater to the privileged few when you could cater to the privileged many?



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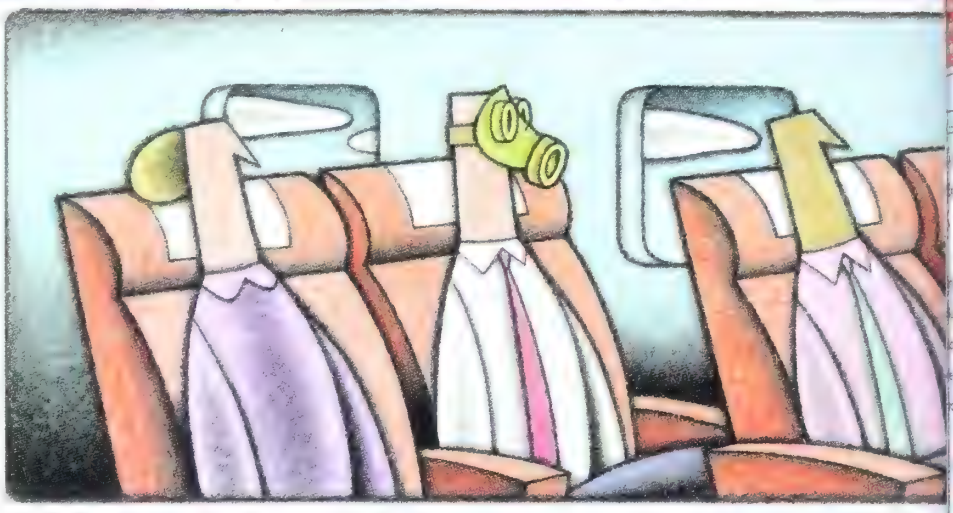
Health

CLEARING THE AIR INDOORS



The night after Sandra Ruffin had her Boone (N.C.) home recarpeted, she and her six-year-old daughter fell ill. Ruffin's heart raced. She suffered night sweats and muscle pain. Her daughter developed a bad nose bleed, a sinus infection, and blisters on her tongue. Ruffin suspected the chemicals in her new carpet. When she complained, the retailer ripped the carpeting out. But the Ruffins didn't recover. Four years later, Ruffin can't work because she gets easily disoriented. She also has permanent heart damage, and her daughter has asthma.

The Ruffins' case is extreme. But they claim to be among the growing ranks of victims of indoor air pollution. Chemicals, microbes, and lack of ventilation are increasingly seen as sources of illness. According to the Environmental Protection Agency, indoor air is often more seriously polluted than the air outside, even in big industrial cities—and since most people spend the bulk of their time indoors, the problem is wide-ranging. Most recently, indoor pollution hit the news when on July 29 a congressional subcommittee heard testimony on the quality of air in plane cabins.

MEMORY LOSS. Physical reactions to indoor air pollution often resemble flu or allergy symptoms. Commonly, they include itchy eyes, runny nose, sore throat, headache, dizziness, and fatigue. But more severe ailments can arise, from memory loss to asthma and even Legionnaires' disease.

It was efforts to conserve energy, sparked by the fuel crises of the 1970s, that led to elevated levels of indoor contaminants. Planes cut back on fresh air to reduce the fuel needed to pressurize and cool cabins. And builders started constructing better-insulated homes to conserve heat. Newer airplanes are being designed without air blowers over the seats, and modern office buildings have sealed windows.

The Association of Flight Attendants has been complaining about poor air quality in planes for a decade, ever since airliners, which used to circulate 100% fresh air every three minutes, cut back to circulating 50% fresh air every six to nine minutes. Recirculated air exposes passengers and crew to excess carbon dioxide as well as to airborne illnesses, AFA spokeswoman Dee Maki testified. The Federal Aviation Administration claims that planes are adequately ventilated, but it is cooperating with the Centers for Disease Control in Atlanta on a study of disease transmission on airplanes. There is some evidence that flu viruses flourish in plane cabins, and the CDC is concerned about the possible transmission of tuberculosis.

> PLANES CIRCULATED 100% FRESH AIR EVERY THREE MINUTES. NOW, IT'S 50% EVERY SIX TO NINE MINUTES

What can you do about air quality in planes? Diana Fairechild, a former flight attendant and author of *Jet Smart*, a book of in-flight health tips, says pilots control the air vents. "Ask the flight attendant to tell the pilot to have full utilization of air," she advises. If your lungs hurt or it's hard to breathe, ask for an oxygen bottle—extras are carried for the crew for use in emergencies. Also, try lubricating the inside of your nose with baby oil to protect the mucous membranes from drying and cracking, which can make it easier for viruses to get in, she says. Drink lots of water, and avoid alcohol and caffeine, which are dehydrating.

Poor ventilation is al primary source of pollut office buildings. Block badly located vents, a po outside air source such truck-loading dock, and teria buildup can cause i

EXPERT ADVICE. If you your building is makin sick, keep track of your toms and when they And find out if others similar symptoms. Your ing manager can hire in al hygienists trained in nosing and solving indo problems. Employees ca the National Institute f cupational Safety & Hea get health-hazard eval information. You can d anonymously if you fe prisal from your compa

Other causes of indoo lutants are chemicals, su formaldehyde, used in c ing, furniture, paints, ers, and building mate More familiar culprits a bacco smoke, radon, asb lead, and pesticides. The way to safeguard your ronment is to eliminat source of the pollution. F that, increase ventilatio

The EPA advises tho drying, cleaning, or placement of water-dam carpets or building mat since they can harbor releasing bacteria and m Don't buy more paint nish, or glues than you They can leak carcin such as benzene when s And of course, follow tions: Use only in well- lated areas. *Pam*

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ENVIRONMENTAL PROTECTION AGENCY
Public inquiry number 202 260-2080

IAQ PUBLICATIONS 800 394-0115
Publisher of *Indoor Air Review* newsletter and books on indoor air issues

NATIONAL INSTITUTE FOR OCCUPATIONAL HEALTH & SAFETY
800 35-NIOSH
Information on building hazards

NATIONAL PESTICIDES TELECOMMUNICATIONS NETWORK
800 858-7378
(in Texas 806 743-3091)

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THE BURNING MUST STOP. NOW!

The world's rain forests are burning. And a wealth of wildlife is trapped in the fire's path.

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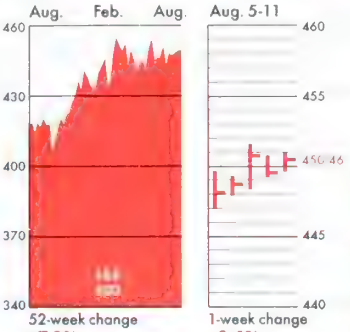
vestment Figures of the Week

ENTARY

nton budget victory touched ally in the bond market that d over to stocks. The Dow in- ils set new records once as did the NASDAQ. But indard & Poor's 500 was un- mount a sustained piercing 450 level—the result of the f the big drug and consumer on that index. Stocks d also made new highs in an- ion of further interest-rate verseas. Gold broke sharply iors of Chinese selling circu- n the market.

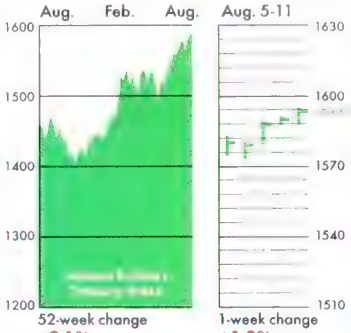
STOCKS



52-week change +7.8%

1-week change +0.4%

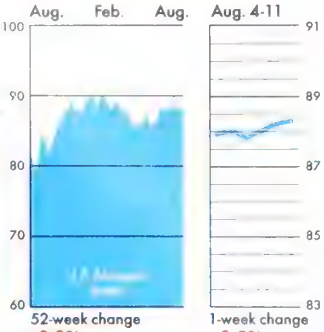
BONDS



52-week change +9.1%

1-week change +1.2%

THE DOLLAR



52-week change +8.2%

1-week change +0.5%

ARKET ANALYSIS

STOCKS	Latest	% change Week	52-week
JONES INDUSTRIALS	3583.4	0.9	7.9
ZE COMPANIES (S&P MidCap Index)	169.7	0.4	18.1
L COMPANIES (Russell 2000)	240.0	0.6	24.7
OMPANIES (Russell 3000)	260.3	0.5	10.8

EIGN STOCKS	Latest	% change (local currency) Week	52-week
ON (FINANCIAL TIMES 100)	3006.1	2.2	30.5
O (NIKKEI INDEX)	20,732.6	1.1	40.3
NTO (TSE COMPOSITE)	4015.9	0.7	18.9

FUNDAMENTALS	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.09%	3.15%	3.19%
30-YEAR TREASURY BOND YIELD	6.44%	6.55%	7.33%
S&P 500 DIVIDEND YIELD	2.79%	2.79%	2.94%
S&P 500 PRICE/EARNINGS RATIO	22.8	22.8	24.5

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 26-week moving average	446.3	446.2	Positive
Stocks above 26-week moving average	58.4%	58.3%	Negative
Speculative sentiment: Put/call ratio	0.42	0.49	Positive
Insider sentiment: Vickers sell/buy ratio	2.13	2.25	Neutral

DUSTRY GROUPS

BRIDGE INFORMATION SYSTEMS INC.

R-WEEK LEADERS	% change 4-week	52-week	Strongest stock in group	% change 4-week	52-week	Price
ANSPORTATION SERVICES	16.0	31.1	PITTSTON SERVICES GROUP	36.8	39.0	21 3/8
OMEBUILDING	15.1	38.5	PULTE	28.9	39.8	35 1/8
RNISHINGS AND APPLIANCES	13.9	36.3	ARMSTRONG WORLD INDUSTRIES	24.6	24.1	38
RLINES	13.3	14.1	USAIR GROUP	23.6	34.7	17
OOD WHOLESALERS	8.5	18.5	SYSCO	13.9	15.0	28 3/4

R-WEEK LAGGARDS	% change 4-week	52-week	Weakest stock in group	% change 4-week	52-week	Price
OUSEHOLD PRODUCTS	−10.9	−7.9	COLGATE-PALMOLIVE	−15.7	−7.3	49
PPAREL MANUFACTURING	−10.3	−19.1	LIZ CLAIBORNE	−20.6	−32.0	24 1/8
RUGS	−10.0	−33.8	MERCK	−13.0	−42.4	30
EALTH-CARE SERVICES	−9.9	−45.8	ALZA	−19.1	−59.2	20 1/8
OMPUTER SYSTEMS	−9.5	−37.0	APPLE COMPUTER	−25.0	−34.3	28 1/2

UTUAL FUNDS

MORNINGSTAR INC

DERS -week total return	%
VINTHROP FOCUS AGGRESSIVE GROWTH	11.7
MERRILL LYNCH TECHNOLOGY A	11.1
HOMSON OPPORTUNITY A	9.4
week total return	**%**
BHG GROWTH	80.5
FA JAPANESE SMALL COMPANY	73.2
EXINGTON STRATEGIC INVESTMENTS	73.0

LAGGARDS Four-week total return	%
LEXINGTON STRATEGIC INVESTMENTS	−9.9
UNITED SERVICES GOLD SHARES	−8.6
LEXINGTON GOLDFUND	−8.4
52-week total return	**%**
INVESCO STRATEGIC HEALTH SCIENCES	−17.3
FIDELITY SELECT HEALTH CARE	−16.1
FIDELITY SELECT MEDICAL DELIVERY	−13.4

ELATIVE PORTFOLIOS

DRI/McGRAW-HILL

llar amounts
present the present
lue of $10,000
ested one year ago
each portfolio

rcentages indicate
e-day total returns

Foreign stocks
$14,147
+0.34%

Treasury bonds
$12,158
+0.84%

U.S. stocks
$11,036
+0.04%

Gold
$10,971
−5.80%

Money market fund
$10,230
+0.05%

data on this page are as of market close Wednesday, Aug. 11, 1993, unless otherwise indicated. ustry groups include S&P 500 companies only; performance and share prices are as of market close Aug. 10. Mutual fund returns are as of Aug. 6. Relative portfolios are valued as of Aug. 10. A more detailed explanation of this page is available on request

THE GOOD NEWS FROM THE BUDGET FIGHT

The Clinton bond rally is chugging along. Between Clinton's election last November and the day before the House passed his budget deficit-reduction bill, yields on the 30-year Treasury bond dropped by more than a percentage point, to 6.54%. Since passage, the rally has entered its second leg. Yields fell to 6.44%, and long-term rates are heading lower still.

Lots of people attribute the bond rally to the coming tax deluge that they believe is certain to dampen economic growth, which will keep inflation pressures at bay. They're only partly right. The markets just may be rewarding the first serious attempt in more than a decade to control runaway government debt. They may be saying that government will soon begin to take fewer financial resources from the nation, leaving more for private investment and growth. If this is the markets' message, then interest rates are falling in good measure because of fiscal responsibility, not because the economy is grinding to a halt under a heavy tax burden. Deficit reduction now has a life of its own.

Indeed, Washington appears to be achieving deficit reduction without tanking the economy. The decline in interest rates by more than a percentage point since November may provide just enough stimulus to largely offset the fiscal drag from the deficit-reduction program. Inflation is low, too. The consumer price index rose at a 2.2% annual rate in the latest quarter, and all the evidence, from white-hot international competition to discount shopping, suggest further downward pressures on wages and prices. And interest rates are coming down in Europe and Japan, leaving room for further interest-rate declines in the U. S. Add it all together, and net result is economic growth hovering around the 2½% l el. Not good, but not awful.

True, in a more ideal world we would have preferre higher ratio of spending cuts to tax hikes in this budget b Yet even before agreement on the deficit-reduction packa there were signs that government spending is decelerati Government purchases of goods and services has dropp by more than 9% since early 1991. Federal employment, b civilian and military, has declined sharply over the past f years. The new budget projects spending increases at a me 4% rate during the next five years, the lowest five-ye growth rate in more than 20 years. If the numbers come anywhere close to this, the U. S. could have the best budg record of any industrial nation, with the possible excepti of Japan.

The cost of the health-care program is still a wild card, course. And the additional spending cuts this fall, as pro ised by President Clinton, will spark more political fight But Vice-President Gore's National Performance Review h the potential of delivering billions in savings if it cuts an quated programs left over from the New Deal and succes fully downsizes the Health & Human Services Dept. and ot er federal bureaucracies.

A big, positive surprise could indeed be in the makin The conventional wisdom is that the deficit will come in hig er than the government projects, and economic growth lov er. But if President Clinton and Congress stick to their gur on budget restraint, the opposite could just possibly be tru

CRONY CAPITALISM IN TAIWAN AND KOREA

Two of Asia's leading Tigers are in trouble. The government-business alliances that powered the economic miracles of Taiwan and South Korea are unraveling—just as the two nations face slower growth and increasing competition from China and Southeast Asia. The faster these top-down, export-oriented, command regimes move to more open, pluralistic societies, the quicker they can shift to more competitive, consumer-driven economies.

In the interim, however, there may be trouble. New democratic reforms are challenging the crony-style capitalism that prevails in both countries. In the past, powerful business groups were able to use their political connections to receive government support for their huge projects automatically. Now, Taiwan's increasingly independent legislators are vetoing these plans, incurring the wrath of the big-business elite. In fact, the country's entire political structure is in transformation. This month, a group of reformers defected from the Kuomintang, which has ruled the island for 40 years, and the party threatens to break apart, much like Japan's Liberal Democratic Party.

In Korea, the new reformist President, Kim Young-Sam, is trying to break the stranglehold the country's large con glomerates, or *chaebol*, have on the economy. He's attempt ing to favor smaller entrepreneurs and increase foreign in vestment to boost local competition. Kim is also launchin wide-ranging corruption investigations.

Critics of Western-style democracy, such as Singapore's se nior leader Lee Kuan Yew, no doubt will see in Taiwan an Korea proof that economic growth and Western-style democ racy are incompatible. They're wrong. From Tokyo to Bue nos Aires, state-directed authoritarian capitalism has invar iably led to major political corruption and economi inefficiencies. Political, bureaucratic, and business elites us the government to foster their own mercantilist goals. No only do trading partners suffer, but so do members of thei own middle class.

During the cold war, the U. S. strongly supported one-par ty rule in Asia to combat communism. Now, Washingto must move on and build new relationships based on share economic interests. Though it may upset ties to friends tha date back decades, the U. S. should throw its full support be hind the reformers trying to change Asia's largest Tigers.

ESS WEEK
AUGUST 30

BusinessWeek

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"ANYTIME, ANYWHERE" COMMUNICATION IS BOB ALLEN'S VISION. HIS DEAL WITH CRAIG McCAW MAY MAKE IT A REALITY

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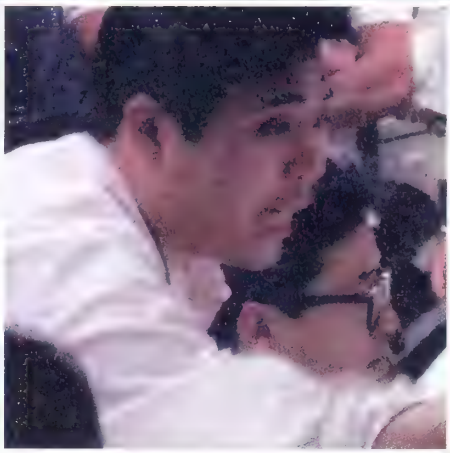

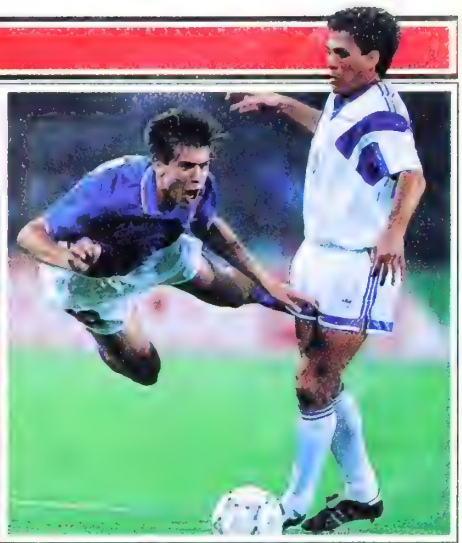

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The party has some glitzy candidates

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In yet more financial rejiggering, KKR could split Nabisco from RJR

"WHY ARE THEY DOING THIS?"
An industry whiz talks tobacco

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New products to the rescue

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A new breed of microscopes will have far-ranging uses

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91 INDEX TO COMPANIES

94 EDITORIALS
A level field for telecom's titans
Don't play games with the dollar

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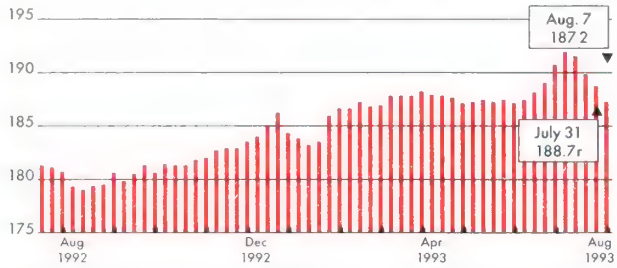
BusinessWeek Index

PRODUCTION

Change from last week: −0.8%
Change from last year: 4.4%

1967=100 (four-week moving average)

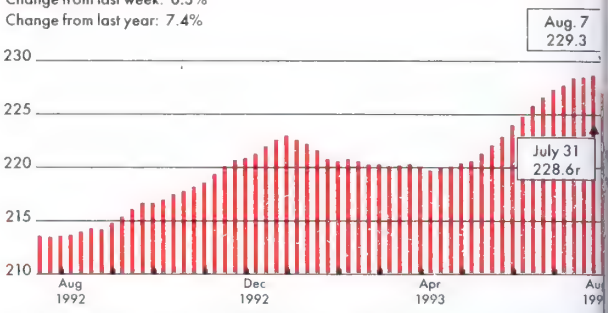


The production index dropped during the week ended Aug. 7, as electric-power output continued to fall back to normal levels after high demand in July. On a seasonally adjusted basis, output of autos, trucks, steel, and coal increased, while in addition to electricity, output of paperboard, lumber, and rail-freight traffic declined. Crude-oil refining and paper production levels were unchanged. Before calculation of the four-week moving average, the index fell to 187.2, from 189

BW production index copyright 1993 by McGraw Hill Inc

LEADING

Change from last week: 0.3%
Change from last year: 7.4%



The leading index increased during the week ended Aug. 7. The first reading sharply lower bond yields from the bond market's current rally was a big plus the index, while higher stock prices and improved growth rates for materials pric real estate loans, and M2 also contributed to the gain. Business failures were fl Because no indicator was down, the unaveraged index jumped to 231.7, from 228 in the previous week.

Leading index copyright 1993 by Center for International Business Cycle Research

PRODUCTION INDICATORS

	Latest week	Week ago	% Change year ago
STEEL (8/14) thous. of net tons	1,854	1,825#	9.3
AUTOS (8/14) units	103,826	92,904r#	0.4
TRUCKS (8/14) units	96,938	83,478r#	27.1
ELECTRIC POWER (8/14) millions of kilowatt-hours	66,074	66,316#	0.5
CRUDE-OIL REFINING (8/14) thous. of bbl./day	14,056	14,157#	1.3
COAL (8/7) thous. of net tons	17,503#	16,603	−7.4
PAPERBOARD (8/7) thous. of tons	821.1#	837.8r	1.2
PAPER (8/7) thous. of tons	789.0#	779.0r	1.9
LUMBER (8/7) millions of ft.	441.8#	473.1	−8.6
RAIL FREIGHT (8/7) billions of ton-miles	20.0#	20.2	−2.9

Sources: American Iron & Steel Institute, *Ward's Automotive Reports*, Edison Electric Institute, American Petroleum Institute, Energy Dept., American Paper Institute, WWPA[1], SFPA[2], Association of American Railroads

LEADING INDICATORS

	Latest week	Week ago	% Cha year
STOCK PRICES (8/13) S&P 500	449.95	448.95	
CORPORATE BOND YIELD, Aaa (8/13)	6.92%	7.04%	−1
INDUSTRIAL MATERIALS PRICES (8/13)	95.7	95.3	–
BUSINESS FAILURES (8/6)	334	334	−2
REAL ESTATE LOANS (8/4) billions	$403.0	$400.3r	
MONEY SUPPLY, M2 (8/2) billions	$3,486.6	$3,482.9r	
INITIAL CLAIMS, UNEMPLOYMENT (7/31) thous.	335	396	−1

Sources: Standard & Poor's, Moody's, *Journal of Commerce* (index: 1980=100), Dun & B street (failures of large companies), Federal Reserve Board, Labor Dept. CIBCR seasonally adj data on business failures and real estate loans

FOREIGN EXCHANGE

	Latest week	Week ago	Year ago
JAPANESE YEN (8/18)	102	103	126
GERMAN MARK (8/18)	1.68	1.71	1.45
BRITISH POUND (8/18)	1.51	1.47	1.94
FRENCH FRANC (8/18)	5.90	6.02	4.93
CANADIAN DOLLAR (8/18)	1.32	1.30	1.19
SWISS FRANC (8/18)	1.49	1.52	1.29
MEXICAN PESO (8/18)[3]	3.120	3.120	3.100

Sources: Major New York banks. Currencies expressed in units per U.S dollar, except for British pound expressed in dollars

MONTHLY ECONOMIC INDICATORS

	Latest month	Month ago	% Cha year
CONSUMER PRICE INDEX (July)	144.4	144.4	
PRODUCER PRICE INDEX (July) finished goods	125.1	125.3	
INDUSTRIAL PRODUCTION (July) total index	110.6	110.2r	
CAPACITY UTILIZATION (July)	81.5%	81.3%r	

Sources: BLS, Federal Reserve Board

PRICES

	Latest week	Week ago	% Change year ago
GOLD (8/18) $/troy oz.	373.700	376.000	10.6
STEEL SCRAP (8/17) #1 heavy, $/ton	112.50	112.50	27.1
FOODSTUFFS (8/17) index, 1967=100	212.0	209.0	7.5
COPPER (8/14) ¢/lb	90.0	91.5	−22.6
ALUMINUM (8/14) ¢/lb	56.3	57.1	−6.3
WHEAT (8/14) #2 hard, $/bu	3.29	3.23	2.8
COTTON (8/14) strict low middling 1-1/16 in., ¢/lb.	52.63	55.02	−9.4

Sources: London Wednesday final setting, Chicago market, Commodity Research Bureau, *Metals Week*, Kansas City market, Memphis market

MONETARY INDICATORS

	Latest week	Week ago	% Cha year
MONEY SUPPLY, M1 (8/2)	$1,091.8	$1,086.3r	1
BANKS' BUSINESS LOANS (8/4)	273.9	270.4r	–
FREE RESERVES (8/4)	883r	748r	2
NONFINANCIAL COMMERCIAL PAPER (8/4)	159.1	159.9	1

Sources: Federal Reserve Board (in billions, except for free reserves, which are expressed fo two-week period in millions)

MONEY MARKET RATES

	Latest week	Week ago	Y
FEDERAL FUNDS (8/17)	3.10%	2.96%	3.3
PRIME (8/18)	6.00	6.00	6.0
COMMERCIAL PAPER 3-MONTH (8/17)	3.18	3.21	3.3
CERTIFICATES OF DEPOSIT 3-MONTH (8/18)	3.13	3.15	3.2
EURODOLLAR 3-MONTH (8/13)	3.13	3.18	3.3

Sources: Federal Reserve Board, First Boston

#Raw data in the production indicators are seasonally adjusted in computing the BW index (chart); other components (estimated and not listed) include machinery and defense equipme
1=Western Wood Products Assn. 2=Southern Forest Products Assn. 3=Free market value NA=Not available r=revised NM=Not meaningful

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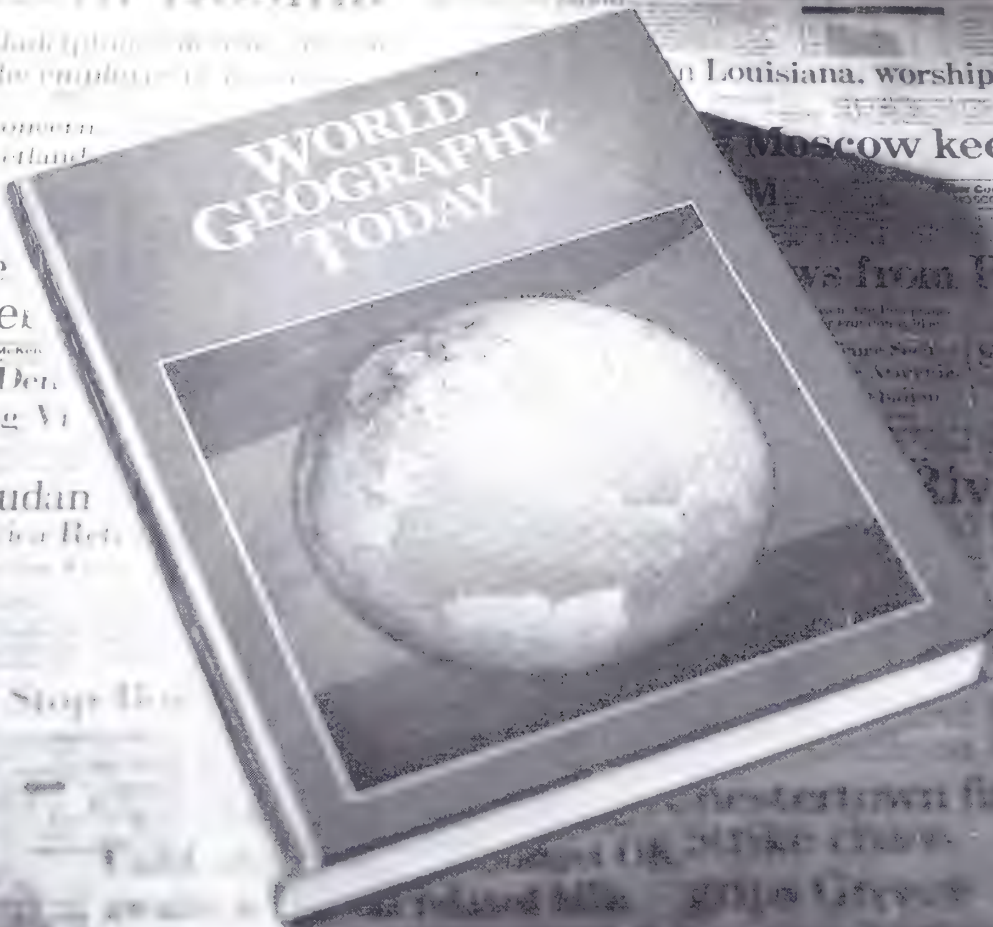

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Readers Report

GIVE LOU GERSTNER —AND IBM—A BREAK

Let's see, 100% minus 20% equals 80%. "IBM: A work in progress" (Top of the News, Aug. 9) quoted a Forrester Research study showing that 20% (of respondents, presumably) saw no future for their mainframes. That means 80% do—a much higher figure than many would have predicted.

Using statistics in this way smacks of writers striving to find negatives. That's a poor service to your readers, IBM, and its customers, who are looking for fair, objective reporting.

Peter A. Cunningham
Mountain View, Calif.

I notice your article on IBM stock alludes to the "short-termism" that afflicts today's business environment. IBM's new CEO has been in office only three months, yet he has the responsibility for fixing a problem that has probably developed cumulatively over the last 10 or more years.

The question is not whether to load up on Big Blue stock, but whether the problems that need to be fixed will be identified and relevant solutions found. Anyone in the markets today knows that such solutions for a company as big as IBM do not come in three months, and neither does implementation. To ask whether it is right to buy IBM at this time, after three months, is premature. In my opinion, any answers tendered will be simply guesswork.

Obisco De Yung
Detroit

Your article on IBM clearly outlined the challenges facing Lou Gerstner. With his background, I am confident he can get the job done, given time and recovery in the world economy. As an investor, however, I expect more downs, near-term, than ups. Thus, I found your sidebar, "Time to load up on Big Blue?" to be misleadingly optimistic.

I believe your readers can obtain one-third more shares in a recovering IBM by delaying purchases until the market recognizes the following three realities:

- First, your article cited analysts' 1994 earnings expectations of $1.3 billion, which translates into $2.25 per share. Even if the troubled IBM commanded a normal price-earnings multiple of 15, the price would only be $33.
- Second, IBM's dividend was halved (again) to $1 per year. Even if investors settled for the market average yield of 3%, instead of IBM's recent 5%, the price would drop to $33.
- Finally, the $9 billion charge slashes IBM's book value to under $35. IBM will have difficulty commanding any premium over book value.

Herbert E. Geissler
Pittsburgh

Editor's note: The closing price of IBM's stock on Aug. 16 was 41.

FLAT-PANEL DISPLAYS: WASHINGTON'S BLURRY VISION

In regard to "The Pentagon leads a charge for computer-display research" (Developments to Watch, Aug. 9), the flat-panel-display initiative squares with the policy of the Administration to manage defense conversion by subsidies for existing companies to compete in current commercial markets.

Clinton's industrial policy model calls for managed trade, government subsidy of selected industries, and creation of the government as the consumer of the last resort.

This is bad economics and bad politics. Clinton desires to model the American economy on the economy of the defense industry: government assumption of risk and investment for a given enterprise with profits returned to the quasiprivate sector. This is not a workable model in a competitive, peacetime economy.

Tom Murray
San Jose, Calif.

LET'S GET NAFTA RIGHT THE FIRST TIME

Regarding "NAFTA: The pollution issue is just a smokescreen" (Economic Viewpoint, Aug. 9), the argument that pollution is just a smokescreen to de-

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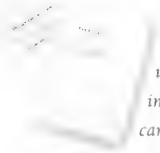

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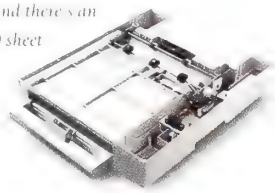

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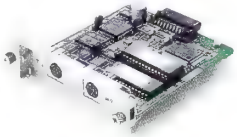

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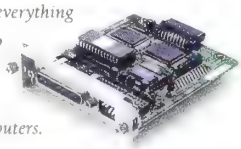

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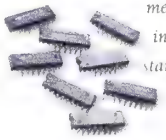

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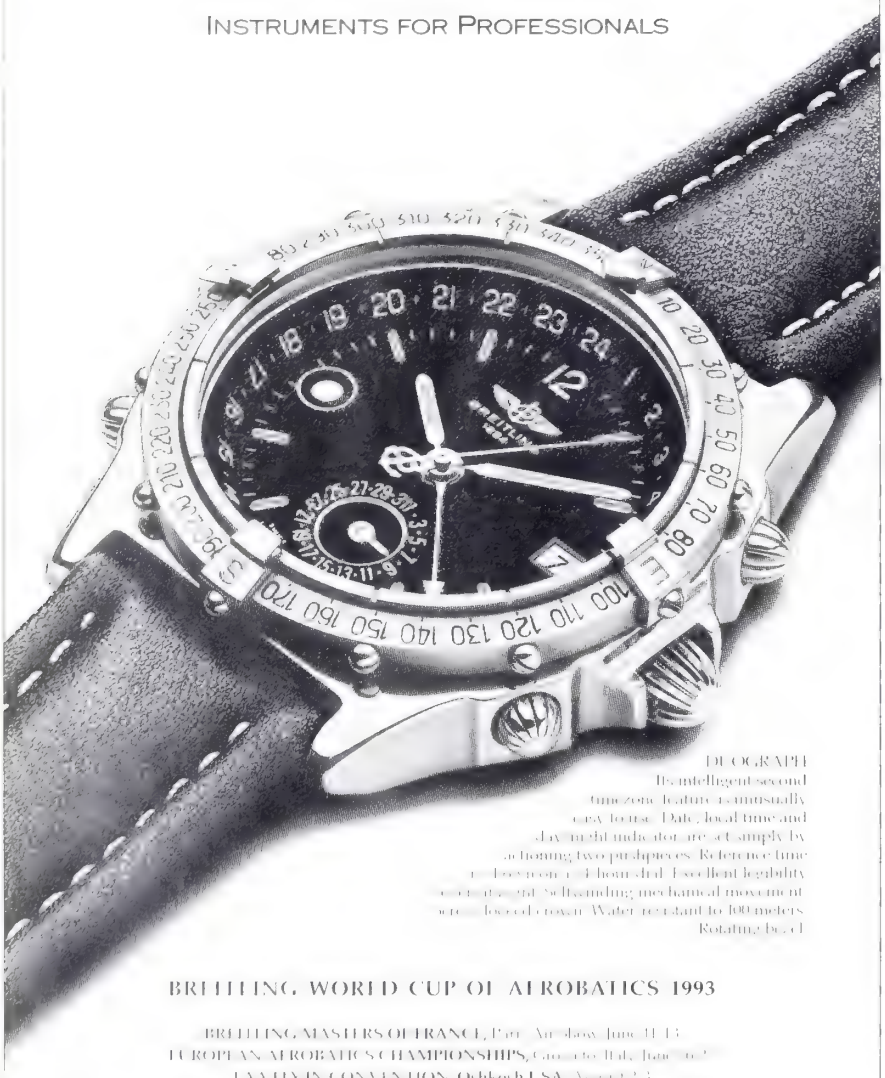

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EAA FLYIN CONVENTION, Oshkosh USA, [illegible]
BREITLING MASTERS OF SWITZERLAND, [illegible]
BREITLING MASTERS OF GERMANY, [illegible] September [illegible]
BREITLING MASTERS OF USA, Pompano Beach, November 18-21

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rail the North American Free Trade Agreement misses the point. Why should people living on the U.S.-Mexico border have to suffer filth, pollution, and degradation to enhance the profit margins of business?

For once, why can't we do the right things first instead of hoping someone will have the moral fiber and capital to fix the problems later?

P.W. Ray[illegible]
Los Ang[illegible]

SCUBA DIVING: EXPERIENCE IS THE BEST TEACHER

It is probably just as well that Dric Greising's dream business scuba [illegible] didn't work out ("Diving right into [illegible] ba," Personal Business, Aug. 16). [illegible] could have ended up dead. When ma[illegible] an emergency ascent, you do not [illegible] your breath through 30 feet of wa[illegible] but, rather, continually exhale. For that depth, the pressurized air in you[illegible] lungs would expand to twice its volume, causing them to explode.

Scuba diving is a great sport, but [illegible] tification is an absolute necessity, a[illegible] experience over many dives.

Peter E. Schw[illegible]
New [illegible]

DOES FAMILY LEAVE MEAN MORE POVERTY?

I take strong exception to your editorial "Make family leave affordable o[illegible] the poor" (Editorials, Aug. 9). The decision to have children should be based in part on one's ability to provide for them. Those who choose not to have children should not be asked to further subsidize those who do.

The rest of us should not have to [illegible] higher insurance premiums or tolerate yet more governmental or institutional interference in our lives with the attendant costs, inefficiencies, and waste.

D. Bryan Vaugh[illegible]
White Bluff, Ten[illegible]

Your comments encourage the [illegible] something-for-nothing syndrome. It has a cost. More benefits—for example, more paid days off—would increase inflation and unemployment. The working poor need more jobs available to them, not fewer. Your suggestion would result in more unemployment and more welfare families.

Colin E. Bays[illegible]
Dover, G[illegible]

Letters to the Editor should be sent to Readers Report, Business Week, 1221 Avenue of the Americas, [illegible] York, N. Y. 10020. Fax (212) 512-4721. All letters must include an address and daytime and evening telephone numbers. We reserve the right to edit letters for clarity and space.

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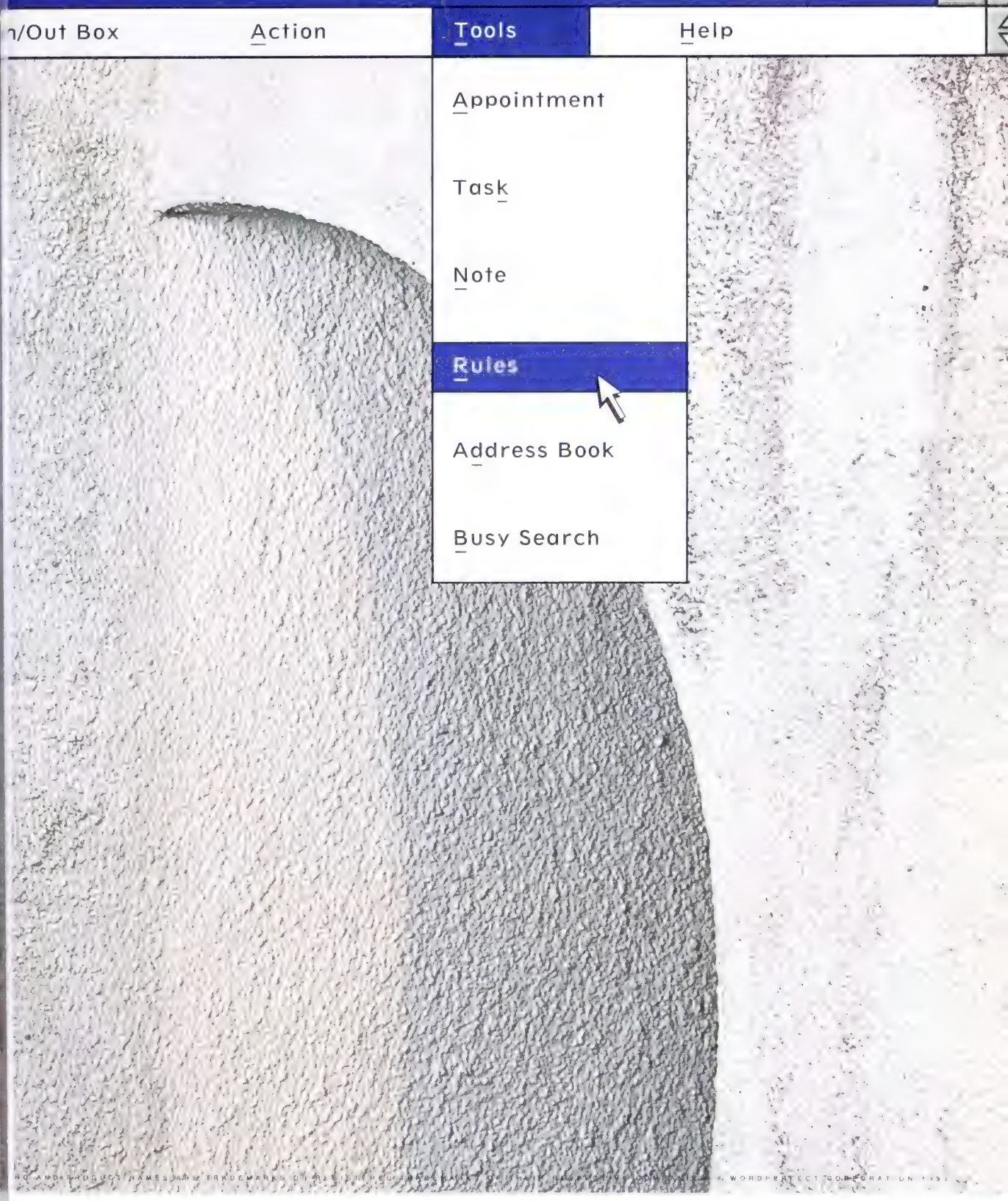

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INTO THE BELLY OF THE BOARDROOM

If fiction represents the mood of the age, then the mood toward business today is decidedly cynical. Amidst the '90s hangover from the greed decade, novelists are finding the business world a rich source of material about scheming, double-dealing, even hypocritical moralizing. It's not a pretty picture, but in three new books, it makes remarkably interesting reading.

In *The Negative*, Michael Covino slyly dissects the interplay of ego, power, and art in the film industry. Colin Harrison's *Bodies Electric* is an engaging story of an executive caught in the crossfire of a corporate *putsch*. And *Yuppie Scum*, by Sean Breckenridge, tells of a group of old college buddies pursuing their stockbroker, an erstwhile friend who has made off with most of their money.

Best by far is *The Negative*, in which a mafioso and a frustrated film professor team up to steal the only negative of a movie and demand a $2.5 million ransom. Ironically, the film's director fears that the movie, a wildly over-budget sequel to his sci-fi blockbuster, will flop. If the kidnappers will just destroy the negative, he can collect the insurance money and be saved from personal bankruptcy and creative disaster. Told alternately from the viewpoints of the director and the hood, the tale shifts unpredictably but believably through a literally explosive ending that leaves no one satisfied—except the reader.

It's an engrossing crime novel with a farcical spirit. Covino, who once worked for Francis Ford Coppola's Zoetrope studio, teases the knowledgeable reader with fictional stand-ins for movie legends, including George Lucas' *Star Wars* series; Coppola's mad drive to complete *Apocalypse Now*; and film critics Siskel and Ebert. There's even a cameo by a star-struck U. S. President.

Beneath its immensely entertaining surface, *The Negative* is a point-blank attack on the way power and money corrupt the creative process. Ego-mad stars, sharkish agents, pinheaded executives, and sycophantic agents abound. And the element that first drew them all—the art of filmmaking—is lost. In the end, the director feels forsaken by everyone he knows. "As for my art," he muses, "I have found that it guarantees me nothing, no relief, no freedom, nothing but a still more keenly felt solitude."

In *Bodies Electric*, protagonist Jack Whitman expects no fulfillment from work. He knows he's a soulless corporate climber who will do anything for power. He's the perfect tool for his boss, a hyperambitious executive of a global media conglomerate—clearly patterned after Time Warner Inc.—who is plotting an international merger that will topple the company's aging chairman.

The story, which includes such deft plot devices as the pirating of secret facsimile transmissions, is smart about cutthroat corporate politics and big-time dealmaking. The shifting allegiances ring true: Whitman is first shunted off takeover team, then co-opted by the battled chairman, and ultimately ruin by an accident for which he bears so blame. This is a convincing, chilling n rative of base games played in the per reaches of the corporation.

But author Harrison, whose previ novel was *Break and Enter*, undermi his strong story by giving it two disp ate threads. As the boardroom ba rages, Whitman undergoes a perso apotheosis. A widower, he is reb when he impetuously takes an impov ished single mother and her child i his home. Ultimately, he falls in lo All the while, he coldly thwarts effo at reconciliation by the woman's tranged husband. Indeed, the husba undone by passion and pride, is the n el's only real hero. The personal st helps round out Whitman's charact and Harrison writes more feelin about sex than most contemporary n elists. But his failure to fuse his t stories is annoying.

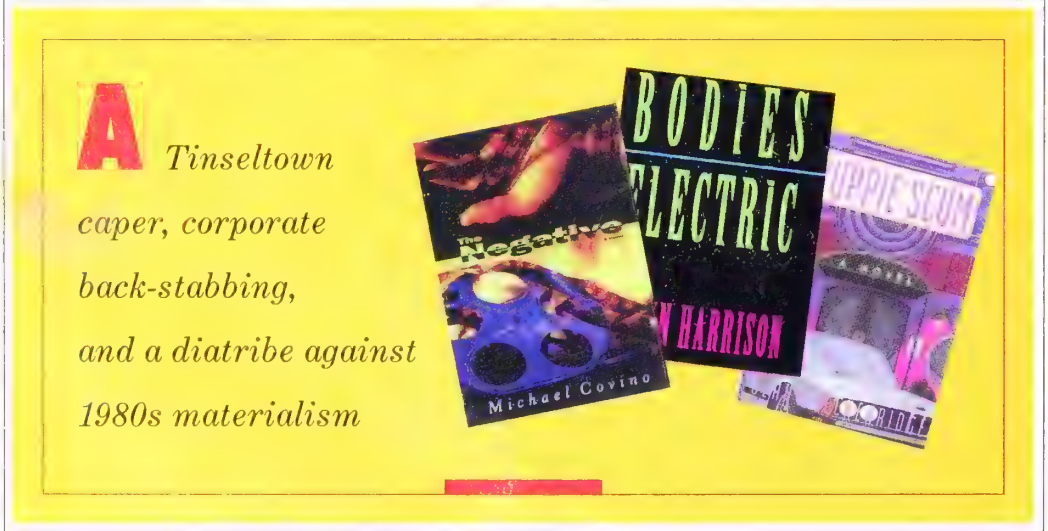
A more serious case missed potential is *Yup Scum*. The plot, involvin group of prosperous form college buddies, has pro ise. The stockbroker am them uses his compu mastery to loot his frien bank accounts. He a heists one of their wi and plans to flee on a wo tour—with her and $22 r lion. The victims chase couple to New York a spend a weekend full of s prises tracking them dov

Yuppie Scum could ha been a powerful postm tem on the greed deca but Breckenridge, a sec ities attorney writing under a pseu nym, isn't up to the task. His characte especially one brutish former Dre Burnham Lambert financier, aren't fu developed. His descriptions of N York—from the homeless in the P Authority bus terminal to the lewdn of underground sex bars—are so ov done that they're unintentionally hum ous. But Breckenridge gives his gree est characters their comeuppance a way that's satisfying if not entir credible.

An interesting trio of books. C knockout, one complex and compell near-miss, and one promising thou flawed effort. In the marketplace boardroom fiction—a growth industry sorts—it's not a bad success rate at a

BY DAVID GREISI

Correspondent Greising is living a life in Chicago.



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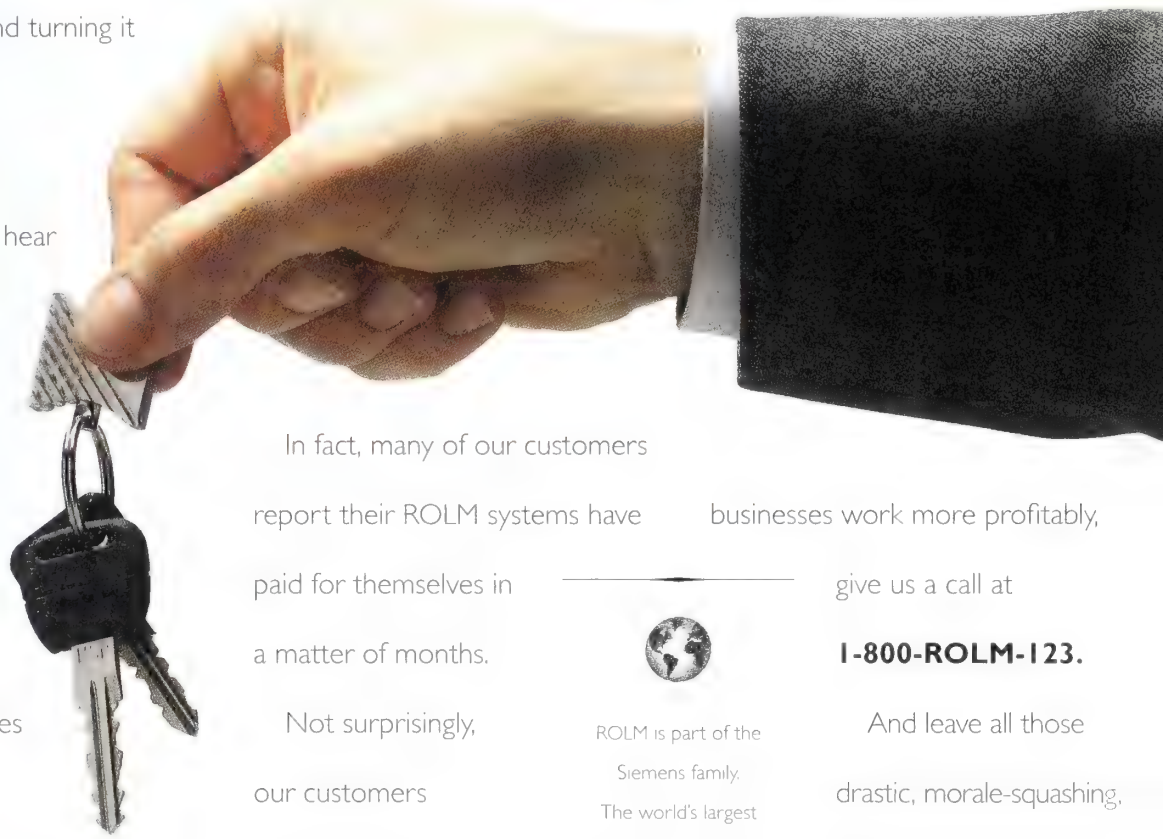

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CLINTON'S BUDGET ISN'T JUST BAD —IT'S UNCONSTITUTIONAL

BY PAUL CRAIG ROBERTS

The tax hike will slow the economy, thus wiping out any deficit reduction. Even more worrisome is the retroactive increase, which the Constitution explicitly forbids

PAUL CRAIG ROBERTS IS CHAIRMAN OF THE INSTITUTE FOR POLITICAL ECONOMY IN WASHINGTON

Clinton's deficit-reduction plan mounts no attack on federal spending or the government's growing indebtedness, but its retroactive features do assault the U. S. Constitution and legal precedent. Paradoxically, the retroactivity amounts to a tacit concession by Clinton of the validity of the supply-side principle that a rise in marginal tax rates discourages economic activity and hence fails to produce additional revenues.

Misinformation is rife about the deficit reduction in Clinton's plan. In a cover story on the plan's squeaky passage, *Time* proclaimed the end of the Reagan era of soaring deficits. The facts are quite different. The House Budget Committee estimates that the plan will add $1.1 trillion to the national debt during 1994-98, with deficits averaging $220 billion a year. In contrast, Reagan's deficits during 1981-88 averaged $167 billion.

Moreover, the House Budget Committee estimates are likely to prove optimistic, because they assume higher real economic growth (2.8% in 1993, 3% in 1994, and 2.9% in 1995) than the economy can produce under the higher tax burdens. The Clinton Administration has already cut its real growth forecast for 1993 to 2.1% from 3.1%, adding $108 billion to its deficit estimate for the 1993-98 period. If this one-percentage-point slowdown were to extend over the period, the cumulative deficit would rise by $347 billion, more than wiping out the deficit reduction expected from the tax increase.

SLOW ZONE. Both economic theory and empirical evidence predict that Clinton's tax hike will slow the economy. The only question is: How much? Evidence published in scholarly journals suggests that Clinton's tax increase will reduce real economic growth in future years by one-third of a percentage point, adding $114 billion to the budget deficit during 1994-98.

Altogether, this slowdown in growth would push the deficit estimate up by $222 billion, essentially wiping out the expected revenues from the tax hike. But the final outcome could be much worse. According to the Internal Revenue Service's *Statistics of Income*, 66% of the approximately 850,000 personal income tax returns that report adjusted gross income of $200,000 or more are filings from small businesses reflecting partnership and S Corporation income. This income is produced by 60-hour workweeks and determines whether a business buys another delivery truck or hires another employee. Hence, Clinton's 33% increase in marginal tax rates on "the rich" is aimed at the small businesses that create most of the new jobs.

Deficit reduction will get no help fr "spending cuts" either. The so-called cuts but promised reductions in the rate of grov in new spending. Moreover, the bulk of cuts are not scheduled to take effect until af 1996. The same approach failed for Bush 1990 and for Reagan in 1982 (Tax Equity Fiscal Responsibility Act) and again in 19 (Deficit Reduction Act), and it is pointless repeat the same mistake a fourth time i decade. Not even politicians' memories that short.

But the real significance of Clinton's p has nothing to do with deficit reduction. lies in another direction entirely, in its tempt to establish new precedents for retro tive law. Article I, Section 9 of the U. S. C stitution explicitly forbids retroactive law. Supreme Court has permitted some retroact taxation but has never permitted retroactiv beyond the date that specific tax changes first proposed in Congress. Clinton's new t es were first proposed on Apr. 8, 1993, the Jan. 1, 1993, effective date on Clinto tax increase violates legal precedent.

DEATH AND TAXES. Moreover, there is no pr edent for Clinton's retroactive estate tax It is a violation of due process, as well as seemly, to reach beyond the grave. Retroact estate taxes strike at the heart of one's ri to bequeath property. Obviously, testators c not confidently plan their affairs if the guid laws can be overturned after death. T grasping retroactivity, together with the br en 1986 tax reform covenant that closed loopholes in exchange for lower rates, bodes for the future certainty of U. S. tax law. certainty, as is well known, depresses sav and investment.

Clinton and the Democrats have learn their supply-side lessons all too well. Just supply-siders predicted, previous efforts to duce deficits by raising tax rates succeed only in reducing economic activity, thus enla ing the budget deficit. By making his tax crease retroactive, Clinton is able to ap higher rates to income that is already earn thus avoiding the disincentive effects that s mie prospective measures for raising reven

Clinton's tax increase, for which only Der crats voted, may be challenged and overturn in the courts. If not, a dangerous new pre dent will have been established. Clinton's n deficit-reduction plan can be made retroact two years, and after that a government d perate for revenues can use retroactive laws to confiscate wealth. Clinton's tax crease won't reduce any deficit, but it may s nal the end of our Constitutional protecti against ex post facto laws.

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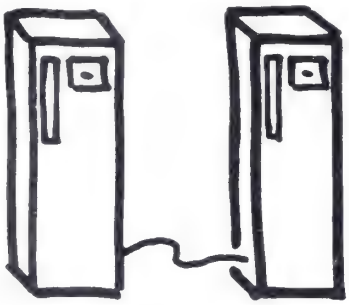

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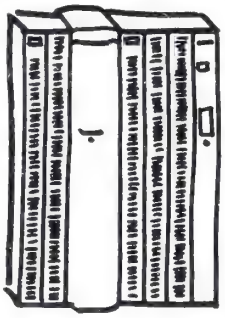

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BY GENE KORETZ

THE PREVAILING MOODS ARE GLOOMY AND GLOOMIER

Optimism seems to be a scarce commodity on the U. S. economic scene these days. According to the University of Michigan's latest consumer survey, the steady decline in consumer confidence this year has now erased all of the gains recorded since last August. Meanwhile, Dun & Bradstreet Corp. reports that manufacturers' moods deteriorated in July for the third straight month, reflecting "not just anxiety about the economy, but a fundamental weakness in the manufacturing sector."

Perhaps the most ominous decline in animal spirits, however, is occurring in the small-business sector, which was responsible for much of the job creation in the 1980s. Based on its latest quarterly membership survey, the National Federation of Independent Business reports that its small-business optimism index has plunged seven points from January to July, approaching the recession low of late 1990 (chart). At the start of the year, 38% of small-business owners expected better business conditions over the next six months and 11% anticipated a decline. Now, 35% see worsening conditions ahead, while 13% can spy an improvement.

SMALL-BUSINESS SPIRITS SINK ONCE AGAIN

DATA: NATIONAL FEDERATION OF INDEPENDENT BUSINESS

A combination of factors seems to have prompted this growing pessimism. Small-business sales in the second quarter were disappointing, and only 35% of NFIB members now expect sales volume to rise in the months ahead—the lowest percentage since the recovery began. At the same time, coming tax hikes and health-care reform are hardly a tonic for small-business owners, who have long labeled taxes and regulation as their two greatest problems. Indeed, some 57% regard the President's economic policies as "poor," compared with just 4% who feel that they are good.

Although small companies boosted their job rolls marginally last quarter, hiring plans in July fell sharply from their April level. Capital-spending and inventory-accumulation plans also fell, as did plans to raise prices. While borrowing activity sagged to a 20-year record low, only 8% of respondents reported problems in securing credit.

The survey results, says NFIB economist William Dunkelberg, give no hint of an economic pickup in the second half: "This is not a growth environment."

FALLING RATES MAKE CONSUMERS A MITE NERVOUS

Falling interest rates may eventually jump-start the economy, but they will have to overcome the ambivalent attitudes of consumers, according to a recent study by Joseph M. Kamen of Indiana University. In the study, 60% of a sample of 5,000 households indicated that Federal Reserve actions to lower interest rates suggest that the economy is in poor shape, compared with just 4% who regard such steps as a sign of economic health. In addition, although more respondents (33% vs. 22%) think that lower rates herald an eventually improving economy than believe the opposite, they also tend to believe that rate cuts imply the government doesn't know how to stimulate the economy.

"The fact that many Americans regard low rates as an omen of trouble, helps shed light on consumers' reluctance to spend," says Kamen.

AN UPHILL STRUGGLE TO TETHER THE HIGH-FLYING YEN

While the financial markets have been obsessed with currency turmoil in Europe and the attempts of the French to defend the franc, another drama in the currency arena has been unfolding away from the spotlight. Economist David Hale of Kemper Financial Services Inc. points out that foreign central banks have added $35 billion to their holdings of Treasury securities so far this year, with most of the increase occurring since April.

The bulk of the buying, says Hale, has come from the Bank of Japan, whi has been struggling to prop up the d lar against the yen and thus halt t rocketlike appreciation of Japan's cu rency. Even though the yen's climb hurting Japanese exporters, the rece sion's withering impact on import d mand combined with lower commodi prices and the so-called J-curve effe continues to bolster Japan's record tra and current-account surpluses.

In short, Japanese authorities a finding it increasingly difficult to r strain the high-flying yen, even thou it is vastly overvalued in terms of pu chasing-power parity. An irony of t current situation is that Japanese vestors have been reluctant to recye their big surpluses into long-term fo eign securities for fear that a rising y will hurt their returns. Short-term fo eign assets of large Japanese banks, f example, now exceed $600 billion. Y the very reluctance of Japanese inve tors to put money into foreign stoc and bonds is contributing to the yen a preciation that they fear.

WHY GERMANY'S AND JAPAN'S LABOR COSTS LOOK OUT OF SIGHT

One of the neglected aspects of th year's dramatic currency shifts their striking impact on the internatio al competitiveness of Germany a Japan. According to the Bureau Labor Statistics, Germany last year w already saddled with the highest lab costs among industrial nations. In 199 the agency reports, average hourly co pensation of manufacturing productio workers in Germany was 60% high than in the U. S. and Japan, 76% high than in Britain, and 54% higher than France. And since then, the mark h generally appreciated against the cu rencies of European countries, which count for the bulk of German export

This year's record appreciation of th yen—not only against the dollar b against European currencies—tells a si ilar story. In 1992, for example, acco ing to BLS estimates, U. S. and Ja nese manufacturing workers receiv just about the same hourly compensati in both yen and dollar terms. At th same time, Japan's industrial work were paid 4% less than French work and 10% more than British workers. f you translate the same labor costs today's exchange rates, however, Ja nese labor costs wind up 25% high than U. S. hourly compensation and 5 and 76% higher than hourly pay France and Britain, respectively.

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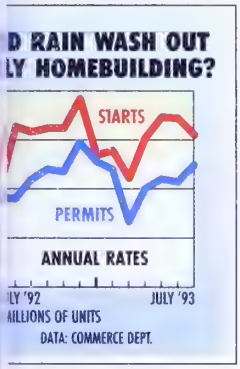
GUST 30, 1993

BY JAMES C. COOPER AND KATHLEEN MADIGAN

WICE-BURNED MANUFACTURERS RE STILL SHY

he factory sector may feel like the unpopular host who threw a party and nobody came. After sprucing up their global competitiveness and putting some ex- shine on their productivity gains, manufacturers may ll be fearing that—once again—no one is going to ring doorbell.

The problem: While demand is growing, its pace isn't ong enough to touch off the rapid advances in factory put and hiring that are typical in an expansion. More- r, too much inventory may still be causing retailers to d off on ordering. And because the factory sector has ped twice before in this recovery, businesses won't ap up production until new orders are firmly in hand.



The winners in all of this are manufacturing's customers, especially consumers. Competition is so stiff that businesses are having difficulty raising prices, and shoppers are reaping the benefits. The upshot is that manufacturing is boosting productivity to lower costs. Inflation is under wraps, and long-term interest rates are hitting new lows almost every day.

Those factors brighten the outlook for the U. S. econo- in the second half. Falling unit-labor costs for manufac- ing mean increased profits that will add to domestic de- nd. And low rates mean rising outlays for big-ticket ds as well as renewed vigor in housing after its small tter in July.

LONG UMMER'S AP FOR IFLATION

Weather may have caused part of the July dip, though. Housing starts slipped 2.7%, to an annual rate of 1.21 million (chart). But floods in the Midwest and in the Pacific Northwest may have hurt starts in se regions. Homebuilding in the South and Northeast bined to advance by 2.1% last month. Moreover, a 3% in permits means housing demand is still on the rise. That's especially true given the bond-market rally. The e on 30-year Treasury bonds fell during trading on g. 17 to 6.29% after the release of the housing data, and Aug. 18, it closed even lower at 6.26%. That's the est rate in the bond's 16-year history.

t's little wonder that long-term interest rates have pped to historic lows. The combination of moderate ec- mic growth, the first real stab at deficit reduction in re than a decade, and new evidence that inflation is taking a long snooze is a heady tonic for the bond market.

Moreover, because low rates generate demand for manufactured goods as well as for housing and its related trappings, they are one of the best reasons to believe that manufacturers won't feel as slighted in coming months as they probably felt in the second quarter.

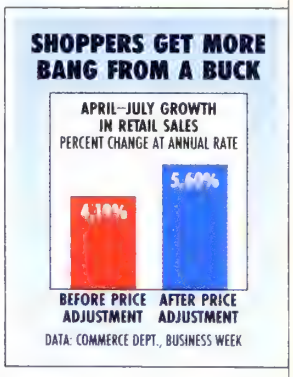
AUTO MAKERS CRANK UP

In fact, the industrial sector began the second half in the right direction. Output rose by 0.4% last month, thanks to a weather-related jump of 3.3% in utility use. Manufacturing output was up just 0.2% in July and started this quarter a bit below its second-quarter average. But output should improve, lifting the factory sector into the plus column for the entire third quarter.

Not all manufacturers are being shunned. Excluding auto production, which was down sharply because of the July model changeover, factory output rose 0.4%. Production of data processing equipment was up 1.3% and is 13.7% above a year ago. In addition, auto makers are gearing up their assembly lines. Third-quarter output plans remain ambitious, and that also means output gains for suppliers to the auto industry.

Perhaps most important, job and income prospects are looking healthy enough for consumers to keep on spending in the second half. Retail sales rose 0.1% in July, but excluding car sales, receipts were up a sturdy 0.4%. Major categories, such as building materials, furniture, apparel, and department stores, did very well in July.

The increase in retail sales suggests that July inventories were drawn down. That's important to future output plans because store shelves were a bit crowded in June. Business inventories rose 0.2% in the month, but store stockpiles were up 0.4%. When compared with their sales, retailers were probably holding more goods than they wanted in June.



Even with consumer spending looking up, the caveat for businesses is that shoppers are avoiding products with heavily marked-up price tags. Consumers are bargain-hunting with a vengeance. Since April, retail sales are up at a 4.2% annual rate. But when adjusted for price changes, real volume has shot up by 5.6% (chart).

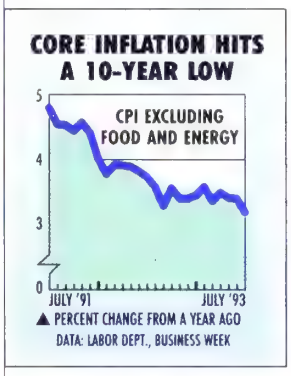
Of course, this value-consciousness has forced goods-makers to bite the bullet on cost-cutting. By paring pay-

rolls and lifting productivity, manufacturing has cut its unit-labor costs for six straight quarters.

These cuts have enhanced the ability of manufacturers to turn a profit even in markets where raising prices is difficult. Although finished-goods prices, excluding food and energy, have risen only 1.7% during the past year, unit-labor costs in manufacturing have fallen by 1.3%. That means profit margins have actually risen, while consumers have gotten a break on prices.

THE GAS TAX WON'T PUMP UP PRICES

In fact, the recent news on inflation has been nothing short of spectacular. In July, the producer price index for finished goods fell 0.2%, after dropping 0.3% in June, and the consumer price index edged up a scant 0.1%, following no change. Through July, annual CPI inflation is running at 2.8%, and excluding food and energy, the core CPI is up 3.2%. That's the lowest reading for core inflation in 10 years (chart).



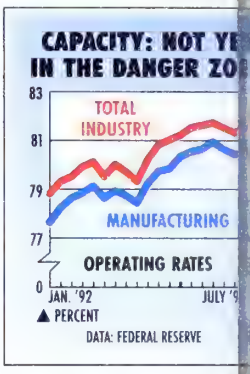
These numbers clearly did not go unnoticed by the Federal Reserve at its policy meeting on Aug. 17. Despite the Fed's recent shift to a policy bias that favors tightening, the latest price data suggest no reason to raise interest rates—probably for the rest of the year. If monthly CPI increases average 0.2% for the rest of 1993, annual inflation will end the year at 2.6%.

Right now, nearly all price pressures are downward—perhaps through 1994. Economic growth is likely to remain moderate, reinforced by the contractionary effects of deficit reduction and recessions in the industrialized nations. Also keeping the lid on prices: minimal wage pressures, foreign competition from developing countries, new efforts to contain medical costs, and OPEC's inability to limit its oil output. Most analysts estimate that the 4.3¢-p gallon gasoline tax, set to take effect on Oct. 1, will ha little impact on inflation.

The ongoing moderation in consumer inflation dur the past year stems entirely from goods prices, reflect the pressures on manufacturing. Excluding food and en gy, annual inflation in prices of consumer goods h dropped to 1.8% in July from 2.9% a year ago.

One reason: Plenty of industrial capacity remains i Operating rates in all industry averaged 81.5% in July, from 81.3% in June, and the rate in manufacturing al was unchanged at 80.4% (chart).

Neither reading is close to the level that, in the pa has been associated with production bottlenecks that fuel price hikes. Moreover, with much of the remaining industrialized world in recession, excess global capacity is also limiting price pressures in the U. S.



Meanwhile, service inflation remains stuck at about 4%. Services are less subject to the array of competitive pressures facing many factories. But even there, inflation is slowing in some previously tough areas. The cost of medical-care services, for example, rose only 0.3% in Ju bringing annual medical inflation down to 6.6%, compar with 9.9% two-and-one-half years ago.

The problem is that cost-cutting is a mixed blessing makes for healthy profit margins and low inflation, and ensures that U. S. manufacturers are competitive globa But because factories are becoming so productive, ma facturers may not need to add significantly to their p rolls in coming months even as demand picks up. while the U. S. economy as a whole revels in the combi tion of solid growth and low inflation, many permanen laid off workers will miss the party.

THE WEEK AHEAD

CAR SALES

Tuesday, Aug. 24

Sales of domestically made cars and light trucks probably did not show much change in mid-August from their disappointing pace early in the month. For the first 10 selling days, new vehicles sold at an annual rate of 10.3 million, down from 11.5 million in all of July. The good news for manufacturers, though, is that the weak sales may reflect low inventories that are forcing some to wait on buying a new car.

DURABLE GOODS ORDERS

Wednesday, Aug. 25, 8:30 a.m.

New orders taken by durable-goods manufacturers probably fell by 3.5% in July, according to the median forecast of economists surveyed by MMS International, a division of McGraw-Hill Inc. Durable goods shipments likely fell 2.5% in July, after rising 2.3% in June. Orders rose 3.8% in June but had fallen in each of the three previous months. The expected decline in new orders ensures that unfilled orders in July fell for the fifth consecutive month.

EXISTING HOME SALES

Wednesday, Aug. 25, 10 a.m.

The MMS economists forecast that the housing market continues to strengthen as mortgage rates fall and the employment outlook solidifies. Sales of existing homes likely rose to an annual rate of 3.75 million in July. That would be up from a 3.69 million pace in Ju and would be the best sales performa in six months. The increase in resales suggested in part by the July surge mortgage applications.

INITIAL UNEMPLOYMENT CLAIMS

Thursday, Aug. 26, 8:30 a.m.

New filings for state unemployment b efits probably fell to 330,000 for t week ended August 21. That pace wo be little changed from the 332,000 clai filed in the first week of August. Bu would be a sharp improvement from t rate in the last two weeks of July, wh claims averaged 365,000. Back th many autoworkers filed for benefits cover layoff periods while factor closed for model changeovers.

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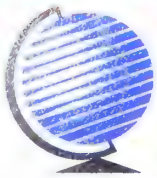
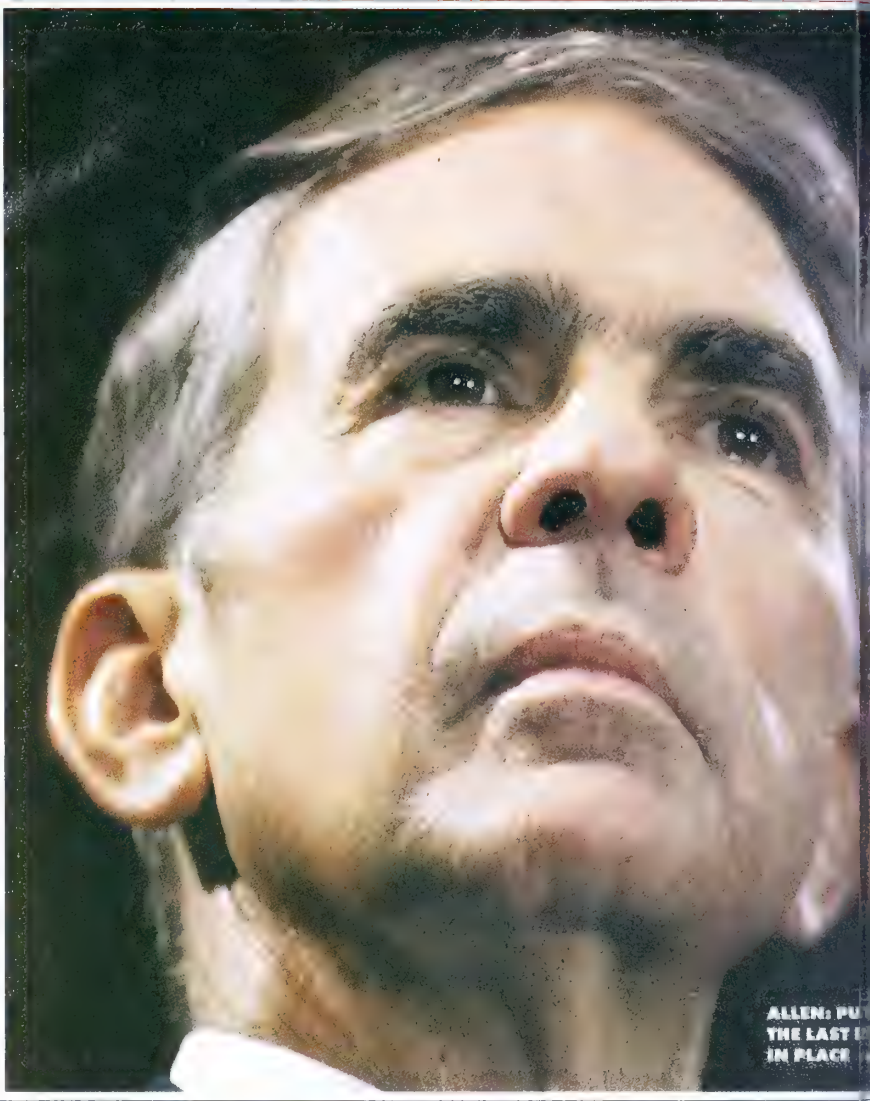


He's no technology whiz. He never attended Harvard B-school. He's not even much of a public speaker. But in his quiet, determined way, AT&T Chairman Robert E. Allen has succeeded where dozens of other CEOs have failed. He has taken one of the world's most entrenched corporate cultures and turned it around, shattering the old icons, cleaning out the deadwood, luring in outsiders, and infusing a sprawling empire with a simple, overarching vision of the future. Most important, he has had the guts to do—and spend—whatever it takes to make that vision a reality. No halfway measures for Bob Allen.

So maybe it shouldn't have come as a surprise when on Aug. 16, he announced that instead of taking a minority stake in McCaw Cellular Communications Inc., as the two companies had agreed in principle last November, American Telephone & Telegraph Co. would take over the No. 1 cellular-phone company outright for $12.6 billion in new stock. After all, just two years ago, seeing that AT&T's own computer division was probably never going to end its losses and become competitive, Allen didn't hesitate to mount the biggest takeover in the history of the computer business: the $7.5 billion buyout of NCR Corp.

"ANYTIME, ANYWHERE." With the McCaw merger—which should be completed within a year, barring regulatory snags or successful lobbying against the deal by irate rivals—Allen will have put the pieces in place to realize his vision. It's an idea captured in a simple slogan: "anytime, anywhere" communications. In reality, that means a pervasive, high-tech communications system that will actually track people down and deliver a phone call or a fax, whether they're in the office, on a ski lift, or sitting in an airplane. With AT&T's "intelligent" long-distance network as the backbone, Allen plans an array of communications services that will make it possible to move and use information in new ways. It's a vision that includes voice, electronic mail, and even video, all zapped across AT&T's digital-information superhighway



ALLEN: PU
THE LAST
IN PLACE

and delivered to conventional phones, computers, TVs, cellular handsets, and, soon, to a new generation of wireless devices.

Allen is betting billions that this will all come to pass. In addition to McCaw and NCR, whose computers will be a key link in the anytime-anywhere scenario, AT&T has acquired or invested in a dozen unproven startups to give it hardware and software for the new era of communications. These range from EO Inc., a maker of a wireless "personal communicator" to 3DO Co., a designer of sophisticated set-top boxes for inter tive television (table, page 28).

The financial risk alone is sizal AT&T is paying $12.6 billion in stock McCaw and is assuming $4.9 billion McCaw debt. There's technological r too, such as the possibility that a n wireless system called personal comm nications services (PCS) will emerge a major rival to cellular (page 31). I most of all, Allen's acquisition bi brings major management challeng While he tries to absorb the McCaw eration, develop the new businesses,

AT&T + McCAW = ONE TOUGH AT&T

What AT&T will get from its acquisition of McCaw Cellular Communications

CELLULAR NETWORK

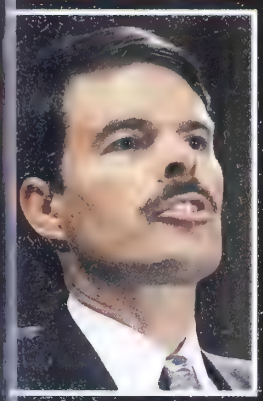
McCaw has 2.2 million subscribers in 100 cities—about 20% of the U.S. market. AT&T, which has no cellular services, can now sell cellular packages bundled together with its long-distance services.

WIRELESS WORL

AT&T gets a network th be used for wireless se and products already i opment. These include held personal commun video games, and mess and networking softwa

AT&T'S BOLD BET

B ALLEN'S NUMBER SHOULD BE 1-800-GUTS. HAS TURNED AT&T INTO A BIG RISK-TAKER, AND NOW THE McCAW DEAL WILL TEST HIS VISION OF THE COMPANY'S FUTURE IN HIGH-TECH COMMUNICATIONS



FOR McCAW, IT WAS TOUCH-AND-GO RIGHT UP TILL THE END

us the company on a brave new digi- future, Allen can't afford to take his off the core long-distance business or let up on his plans for global expan- n. "AT&T has bitten off a great deal in last few years," says Frank Plumley, analyst with Standard & Poor's p., which is reviewing AT&T's debt ing for a possible downgrade after announcement of the McCaw buyout. Allen isn't blind to the risks. But he's painfully aware of how dangerous it uld be not to make these bold moves. en he took over in 1988, AT&T was still reeling from the breakup of the Bell System. It had slashed overhead, but its efforts to enter key new businesses such as computers were foundering. AT&T hooked up with such companies as Olivetti and Sun Microsystems Inc. to get into the market, but old-line managers continued to push homegrown technology. Allen put an end to that by buying NCR and having it subsume AT&T's computer division. Throughout the company, Allen has upended traditional thinking by bringing in outsiders to head key operations (page 30).

In some ways, Allen has little choice. If he can't stir things up and move AT&T into new, fast-growing markets, he could be stuck presiding over another corporate dinosaur. With annual revenue growth averaging about 5%, the core long-distance business is maturing, and stiff competition from MCI Communications Corp. and Sprint Corp. keeps a lid on profits. Many of AT&T's other businesses, such as making phone equipment, are unreliable profit generators. And, beset by recession in European markets and a computer-industry malaise, NCR hasn't proved as profitable as Allen had hoped.

ON THE SIDELINES. By acquiring McCaw, Allen solves two problems at once. He not only positions AT&T for the future, he immediately makes up for one of the company's biggest blunders of the 1980s—missing out on cellular. AT&T Bell Laboratories invented cellular technology, and AT&T began selling cellular-transmission gear to other network operators years ago. But while McCaw, GTE, the Baby Bells, and others blanketed the nation with cellular transmitters in the 1980s, AT&T, strangely, sat on the sidelines. Why? "There wasn't any really good reason," says Allen. One explanation: After being distracted by its wrenching divestiture, AT&T simply may have misjudged the scale of the opportunity before it.

Now, Allen may be paying a premium to get in late: At an estimated $280 per potential subscriber, the McCaw deal is one of the priciest cellular buyouts ever. Still, there's plenty of opportunity left. If growth in cellular calling continues at double-digit annual rates as expected and new services such as wireless data links take off, AT&T could soon see fatter earnings. So despite the dilution of its stock from the new shares issued to buy McCaw, and the cost of absorbing McCaw's debt, AT&T is predicting growth in earnings-per-share next year, though not at the pre-merger pace.

The better the synergy between the McCaw and AT&T networks, the bigger the potential payoff. That's why AT&T's managers began to feel this spring that a proposed minority investment in McCaw and a marketing alliance didn't go

OVERSEAS PLAY

's clout will help AT&T for cellular licenses in markets, creating ma- rtunities—mainly in de- g countries.

PROFITS

AT&T's 1992 net income was $3.8 billion, McCaw's operating profit was $285.6 million. Combined revenues totaled about $67 billion—making AT&T the largest U.S. technology company.

DEBT

The acquisition will raise AT&T's total debt by about 30%, to $21.2 billion, equal to 60% of the companies' combined capitalization of $35 billion.

EMPLOYEES

The total will come to 322,300, including McCaw's 4,400 and Lin Broadcasting's 1,900. AT&T says no layoffs are planned as a result of the acquisition.

far enough. As they negotiated the joint venture sketched out last November, the AT&T team, led by Executive Vice-President Alex Mandl, began to see problems, especially in divvying up the proceeds from calls traveling over the combined network.

Returning from one grueling negotiating session at McCaw's Kirkland, Wash., headquarters in June, Mandl and his staff began to talk of changing the deal to an outright takeover. They presented the idea to Allen, who gave the go-ahead for them to approach Craig O. McCaw, the company's CEO.

Would McCaw bite? The 43-year-old entrepreneur, starting from his Stanford University dorm room in 1969, had parlayed a tiny, family-owned cable-TV system into the leader of the cellular-phone boom. In the process, he built a $1.7 billion, 4,400-employee empire. McCaw, who with his family controls 8% of the company's stock, was thought to be leery about ceding control to AT&T. But when Mandl broached the idea of a buyout, he "learned that McCaw was thinking the same way," Mandl recalls.

HEAD OVER HEART. Why? By then McCaw saw that it was more important for his company's future to create the combined network with AT&T than for him to retain control. "In his heart, he would wish that it wouldn't be better to merge with AT&T," says McCaw Vice-Chairman Wayne Perry. But the head won out. "We couldn't see getting into a situation where we were constantly worrying about which part of the business belonged to which entity," McCaw says. "The business opportunity is an absolute. If we can't get it right, we will become one of 3,000 failed strategic partnerships. Life is too short."

Even after the parties agreed to the idea, though, the deal was touch-and-go until the last few hours. Over the weekend of Aug. 14-15, McCaw, his three brothers, Mandl, and their advisers camped out at various New York hotels and law offices. Not knowing what would happen, McCaw's public relations people prepared various press releases, including one saying they couldn't reach agreement with AT&T. But over soggy Chinese food and cold pizza, the McCaw brothers finally decided late that Saturday night to sell out.

What they get in return is $2.5 billion in AT&T stock, making them as a group the company's largest private shareholder, with 3% of the total. By combining with AT&T in a "pooling of interests" stock swap, Craig McCaw and family members avoid capital-gains taxes. And AT&T won't have to write off an estimated $12.5 billion in goodwill from the merger. "Looking at it strictly as a financial proposition, it's a terrific deal," says Lehman Brothers Inc. Managing Director Robert Willens, a tax expert.

Craig McCaw also gains a seat on AT&T's board. McCaw will give up his CEO post and management of the cellular unit will be up to McCaw President James Barksdale. But the founder says he'll continue to oversee his company from the AT&T board. He won't be a passive director on other matters, either. "Craig is a fiercely independent thinker," says Marc Porat, president of General Magic Inc., a software maker part-owned by AT&T, that Craig McCaw advises. "He will add a voice to AT&T's board like they've never heard before." Says McCaw: "We've been invited to cause a little trouble within AT&T. My future becomes related to the success of AT&T and its investments, not the lead of which is this entity."

INCHING BACK. The McCaw deal has the potential to create a lot of trouble beyond AT&T. The specter of a nationwide cellular-phone service marketed under the powerful AT&T logo has competitors nervous. Worse, say the Baby Bell telephone operating companies, by extending its network directly to consumers through cellular phones, what AT&T is really doing is inching back into the local phone business it exited as part of the Bell System breakup. "That's horse manure," says Allen. "This is not a local exchange service. Only an infinitesimal part of the local exchange calling traffic is carried on cellular." Allen insists AT&T has no intention of getting back into the local phone business.

Well, maybe not right away. Today the price of cellular calling makes it an unattractive alternative to the local phone system. But the arrival of PCS could change all that. The new technology could one day compete with McCaw's cellular system. But McCaw and AT&T are testing it, too. One reason: PCS eventually could be cheap enough to compete with wired phone service in homes and offices.

How real the PCS threat is remains

BOB ALLEN'S SHOPPING SPREE

AT&T's early diversification strategy didn't pan out very well, producing unsuccessful alliances with Sun Microsystems and Italy's Olivetti. Since then, CEO Robert Allen has engineered a string of investments in computers, software, multimedia, and other key technologies.

APR. 1988 Allen appointed chairman and CEO after James Olson dies

JULY 1988 His first deal: A $112 million investment in a joint venture with GTE Corp. to develop digital switching technology

MAR. 1989 Buys Paradyne, a data communications equipment company, and Eaton Financial, an equipment financing unit

DEC. 1989 Spends $285 million to acquire ISTEL Group, a British high-tech company

JUNE 1989 Exchanges $135 million and a 20% stake in AT&T Network Systems International for 20% of Italtel, Italian communications equipment maker

JULY 1989 Gives up on 1983 Olivetti investment, exchanging it for a 17.3% of Olivetti parent Compagnie Industriali Riunite

DEC. 1990 Buys Western Union's Business Services Group for $160 million. Its name: AT&T EasyLink Services

JUNE 1991 The Sun Microsystems deal unravels. Sells 19% interest in workstation maker, acquired in 1988

SEPT. 1991 The big one: NCR joins the AT&T portfolio, for $7 billion in stock

seen. Even without PCS, however, merger of AT&T's wired network and Caw's wireless system could be a on to AT&T's bottom line. Today, 99% all cellular calls go through a local one system before they reach their stination. Analysts expect AT&T will d ways to link cellular customers di- tly to its long-distance network, by- ssing the local phone system, thus lucing the $14 billion a year it pays to those lines. In addition, with a com- ed cellular-long-dis- nce network, AT&T offer package dis- nts to big custom- . That's a market- approach the by Bells can't tch, because they required to offer customers a choice long-distance car- rs. At minimum, y complain, AT&T l use its link with Caw to skim off most lucrative siness customers.

The minute the &T-McCaw deal was announced, the al phone companies swung into ac- n, issuing press releases and mobiliz- lobbyists. Their target: eliminating rules that bar them from long-dis- nce service and telephone-equipment nufacturing. "It's a vivid, vivid re- nder to our federal government that time to get rid of some of these out- ed restrictions and put everybody the same equal footing," says Bell nth Corp. CEO John L. Clendenin. Bell Atlantic Corp. says it will try to block the McCaw deal at the Federal Communications Commission and the Justice Dept. But it admits its real aim is to overturn the Baby Bell restrictions.

The AT&T-McCaw link may finally give the Baby Bells the ammunition they need to sway regulators—especially if they agree to give up their near-monopolies in local service. So, Allen seems to be taking a calculated risk: that the revenue to be gained through wireless services and the access charges he might save will far outweigh what AT&T could lose if the Baby Bells are granted the right to enter long-distance.

> "We've been invited to cause a little trouble within AT&T"
>
> **CRAIG O. McCAW**
> Speaking of his role on the AT&T board

Allen is making one more bet. He hopes the McCaw deal will boost AT&T's business outside the U. S. The goal is to lift today's nearly 25% of revenues to an eventual 40%. Though McCaw's presence now is largely domestic, that could change sharply under AT&T's wing. "We receive two or three requests a day to do something internationally," says Chairman McCaw. But due to McCaw's U. S. focus and lack of resources, most such offers are turned down, he says. Outside the U. S. the company only operates cellular systems in Mexico and Hong Kong. "Now the opportunity to pick and choose the best of those is certainly more available," McCaw says. "We are a huge step in [AT&T's] being a major service provider in other countries around the world."

Cellular service is particularly popular in less developed countries such as Hungary and China, which can use the technology to establish modern phone service far more rapidly than with wired systems. Ken Zita, a partner at Network Dynamics, a New York-based telecommunications consultant, believes McCaw will serve as AT&T's way to wedge its foot in the door of overseas markets. AT&T can offer McCaw's undisputed expertise as an enticement to allow it to build cellular systems. Later, it could expand in those nations into wired networks and other AT&T offerings, he says. But McCaw also could help AT&T expand in Europe, where regulations and other restrictions bar most of AT&T's wired phone services but don't generally apply to cellular.

Of course, AT&T is hardly the only big player to see the explosive potential in wireless communications. Nearly every local phone company wants a piece of the action, along with other cellular operators such as U. S. Cellular, cable-TV operators such as Tele-Communications and Time Warner, paging concerns such as SkyTel, and dispatch radio systems such as Nextel Communications. An upcoming auction of newly freed-up radio spectrum by the FCC, aimed at PCS systems, will bring even more entrants to the market.

WIRELESS WORLD? AT&T's long-distance rivals are also waking up to wireless. The largest, MCI Communications Corp., has nearly $5 billion in cash burning through its coffers thanks to its recent

91 Invests in EO Inc., kes personal communi

92 Buys another maker, Teradata, for ion, leaping into the r massively parallel g

92 Logs into comput , investing in virtual re- ner Spectrum Holobyte

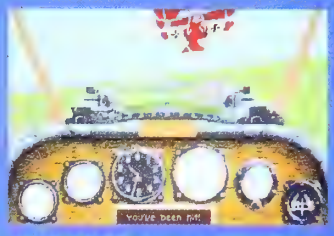
OCT. 1992 Another new mar- ket: Handwriting recognition software. Buys 10% of Silicon Valley startup GO Corp.

DEC. 1992 Buys into General Magic, a consortium developing communications software for wireless transmissions

JAN. 1993 Picks up 5% of 3DO, developer of an interactive multimedia player

APR. 1993 Buys Shaye Communications of England, a manufacturer of the next generation of digital cordless phones, for undisclosed sum

JUNE 1993 Forms partnership with video game company Sega of America to develop technology enabling video game play over phone lines



JULY 1993 More games: Gets a 20% stake in the Sierra Network, an online interactive network since renamed the Imagination Network

AUG. 1993 Raises its stake in EO to 51% and announces that GO will merge into EO. Also invests in Knowledge Adventure, a multimedia educational software company

AUG. 16, 1993 Announces plan to buy McCaw Cellular Communications for $12.6 billion in stock

(BOTTOM RIGHT) PHOTOGRAPH BY RICK RAPPAPORT

deal to sell a 20% stake to British Telecommunications PLC. MCI Chairman Bert Roberts Jr. says a wireless system is among the items on his shopping list. Sprint Corp., the No. 3 long-distance company, also gained a wireless presence through its merger last year with Centel and plans to integrate the Centel cellular service with its own wired network, much like AT&T's goal.

But they'll be hard pressed to match the McCaw acquisition—or to catch up with AT&T's aggressive investing under Allen. When General Magic made it known it was looking for partners, AT&T executives "were all over us—AT&T just blew away the competition with their aggressiveness," says Marc Porat of General Magic.

All these deals, including McCaw, are aimed at increasing traffic over AT&T's network. "The way you do that is by inventing new ways of using the network," says Alain Rossmann, CEO of EO, whose personal communicators will mesh nicely with McCaw's system. "AT&T is big—bigger than IBM. But they're incredibly focused."

Bob Allen says this may be his l big move for some time. The McC merger has taxed even AT&T's copi coffers. "We'd be straining the bala sheet" to do another major deal, he sa Now, Allen says, his task will be make these mergers work and to tend our presence around the glob It's a tall order. But there's little rea to doubt Allen's determination.

By Bart Ziegler, with Catherine A and Elizabeth Lesly in New York, Ka Rebello and Robert D. Hof in San Fra sco, and bureau reports

ALLEN'S ALLIES: THE SHAKER-UPPERS AT AT&T

A year ago, on the day executives from American Telephone & Telegraph Co. and McCaw Cellular Communications Inc. sat down to negotiate for the first time, AT&T's Alex J. Mandl arrived at work sporting jeans and a polo shirt—the kind of clothes McCaw executives wear at their offices. "It seemed like the right gesture," says Gary Friedman, a lawyer who represented McCaw during the talks. But the wrong time and place: Craig O. McCaw and his entourage filed into AT&T's Basking Ridge (N. J.) headquarters in gray suits, leaving Mandl the only one present without a tie.

It's one of the very few missteps that Mandl, 49, made in dealing with McCaw. Indeed, the former shipping executive has emerged as one of the most prominent of a handful of hotshots that AT&T Chairman Robert E. Allen is counting on to help him shake up the hidebound culture at the old Ma Bell.

BIG PROMOTION. Besides Mandl, former manufacturing executive Jerre L. Stead now runs the NCR computer unit, and ex-consultant Robert M. Kavner heads communications products. Three other top officials, David L. Stone, Richard W. Miller, and Carl S. Ledbetter, were recently plucked from rival computer companies. And once the buyout is completed, McCaw President James Barksdale, formerly of Federal Express Corp., will be given lots of latitude in running AT&T's wireless operation.

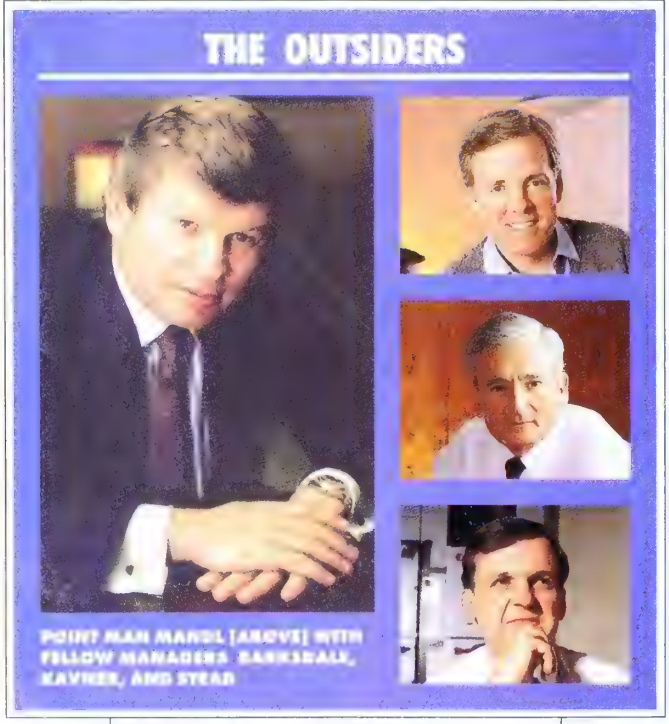
Mandl, however, distinguished himself among the outsiders by playing point man on the McCaw deal, a job that earned him a big promotion in July—to CEO of AT&T's $40 billion long-distance empire. Recruited to AT&T in 1991, by last fall Allen's hired gun was commuting almost weekly to McCaw's headquarters near Seattle. By November, he had engineered AT&T's purchase of one-third of McCaw for $3.8 billion, persuading McCaw that it could benefit from AT&T's vast network and marketing clout. But in June, Mandl suggested to Allen that AT&T buy McCaw outright. Throughout the subsequent talks, Mandl "was steadfast but relaxed," says Friedman, the McCaw lawyer.

All in all, it has been quite a rise for Mandl, an Austrian-born son of a German literature professor. Mandl can to the U. S. in the late 1950s, gradua ed from the University of Californ at Berkeley's business school in 196 and worked early on as a merger and-acquisitions specialist.

He quickly proved himself an ade deal-meister. As a top official at tran portation conglomerate CSX Corp., negotiated the company's 1986 acqui tion of Sea-Land Servi Inc.—and then ran it for th parent. His program: cuttin costs, streamlining manag ment ranks, pushing into ne overseas markets, and inve ing in new technology. Rev nue during his three-ye tenure jumped 75%, to $3 b lion. "He didn't have any e perience in our busine when he came in either," sa John P. Clancey, who su ceeded Mandl at Sea-Land.

Mandl's next challenge? the new CEO of AT&T's Co munications Services Grou he must quickly decide ho to shake up the business u that brings in two-thirds AT&T's revenue and 80% the profits. Already, th group is shutting 40 offic and replacing 3,000 operato with voice-recognition m chines, a move that will sa $200 million annually. Ma dl's big goals: to boost AT&T long-distance revenue growth from i current 1% a year to the industry a erage of 5% and increase quarter call-volume growth, now at 5%, clos to the 15% level enjoyed by archriv MCI Communications Inc. To do it, Ma dl may have to try nontraditional a proaches. Maybe he'll even change t dress code.

By Evan I. Schwartz in New Yo

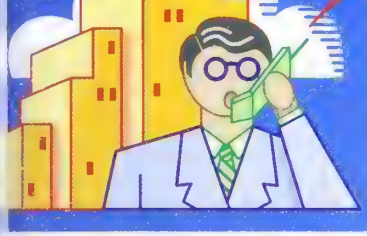


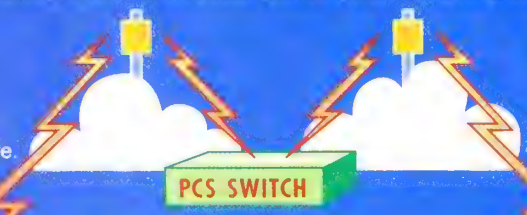
POINT MAN MANDL [ABOVE] WITH FELLOW MANAGERS BARKSDALE, KAVNER, AND STEAD

WHY PCS COULD THREATEN CELLULAR NETWORKS

A personal communications service closely resembles a cellular phone system. However, the technology has several key advantages:

1 It uses small, wireless, handheld phones, just like cellular systems. But PCS units don't have to be as powerful, and so will be lighter and cheaper and have longer battery life.





2 As in cellular systems, calls are routed through networks of transmitters and switches; when a caller moves out of range of one transmitter, a central switch passes the call to another cell. But transmitters are closer together. Therefore, each PCS cell can accommodate at least twice as many calls, lowering calling costs.

3 Eventually, PCS providers—AT&T among them, most likely—may be able to bypass local phone companies to connect callers directly with homes, offices, and cars.

'ATCHING THE NEXT 'ECHNOLOGY WAVE

ill personal communications services produce its own McCaws?

The new frontier of cellular telephones was McCaw Cellular Communications Inc.'s gold mine in the 1980s. The mother lode of the '90s, personal commu- ations services (PCS), could be more of nixed blessing.

This new form of cellular communica- ns—using inexpensive handsets and /-powered "microcell" transmitters in ice buildings and neighborhoods— omises to bring wireless calling to the sses. Someday, it could even become telephone used at home and work— l just about everywhere else.

But the enormous promise comes h risks for existing cellular systems. Caw and other cellular opera- s plan to participate in PCS and free to use the new technolo- over the cellular radio frequen- s they already control. But, hav- sunk billions into existing lular equipment, they're in no h to install more.

That could change by late 1994, en the first PCS networks are ected to come on line. At that nt, a raft of new competitors ld start selling cut-rate wire- s phone service in existing cel- ur markets. The reason: While a network functions like today's ular systems—calls are handed off from one transmission tower to another as a customer moves from one cell to another—the economics of wireless communication will change.

Today's cellular networks use relatively powerful transmitters to relay signals across cells 20 miles or more in diameter. In PCS, the territory is broken into smaller pieces. Since callers are closer to transmitters, the handsets don't generate as powerful a signal. That means they can be smaller, cheaper, lighter, and have longer battery life. And the smaller cells give a PCS system greater capacity. The greater calling volume should spell lower per-call costs, which should attract more customers and push prices down further.

BUILDING A NEW NETWORK

In September, the Federal Communications Commission will decide how to divvy up the market for personal communications services (PCS). Here's what the agency is considering:

- Carving out niches for at least three PCS players per market
- Issuing a combination of national and regional licenses, far fewer of which will be issued than the 734 cellular licenses granted
- Whether to bar cellular carriers from holding PCS licenses where they already do business

DATA: BUSINESS WEEK

How the PCS market develops will be determined largely by the Federal Communications Commission. This fall, the agency is expected to spell out its plans to auction off radio frequencies for PCS. But there's no promise of an easy win for such deep-pocketed bidders as the new AT&T-McCaw combo, cable-TV operator Time Warner, or the Baby Bells. On the contrary, Congress is pressuring the FCC to give smaller companies a chance by allowing them to pay for their licenses in installments.

NEW RIVALS. More critical for McCaw is an expected FCC rule that would bar companies from bidding on PCS frequencies in markets where they already have cellular licenses. That provision would guarantee at least three new competitors to enter each of McCaw's markets. McCaw could still compete in PCS, but it would have to create its own PCS system over its existing frequencies by installing many more cellular transmitters.

No matter how the FCC proceeds, McCaw seems destined to face many more competitors in the 90 markets it serves in the U.S., meaning profits will be squeezed. "We're going to meet these people's price," says McCaw Vice-President Robert Ratliffe. But PCS represents opportunity, too: McCaw has a shot at getting PCS licenses in the 62% of the national wireless phone market its existing cellular network doesn't reach.

One possible FCC scenario could create competition that even the huge AT&T-McCaw team might find disconcerting: MCI Communications Corp. has put forth a controversial proposal for the agency to grant a tiny number of national PCS licenses, in addition to the regional permits. Under the plan, an MCI-led consortium could buy

ALBERTO MENA/BW

such a license, at a price that could total hundreds of millions of dollars. One consortium partner would handle the national marketing and help build the technology backbone, while small local operators would run the systems in their areas and share the revenues.

Whatever happens, PCS won't be an overnight sensation. It will take time and money—lots of it—to build extensive PCS networks. Wayne N. Schelle, president of Baltimore-based American Personal Communications Inc., which hopes to enter the PCS market, predicts that to cover a city the size of Chicago, PCS operators will have to set up at least 200 cells. With a single cell likely to cost about $250,000, that means a sizable up-front investment.

Indeed, companies experimenting with PCS are already seeking ways to hd down expenses. Among the optio: piggybacking on cable-TV networks r building small networks in such ar s as office complexes. Ultimately, th e companies will find ways to make e wireless future happen. And the AT McCaw alliance will have to find n ways to keep up.

By Mark Lewyn in Washing

Commentary/by John W. Verity

HOW AT&T THRIVES—AS OTHER GIANTS FALTER

The old phone company is gone. Today, American Telephone & Telegraph Co. is widely perceived as the nation's—perhaps even the world's—most successful high-technology corporation. It has held on to most of the long-distance telephone market. Meanwhile, AT&T is moving forcefully into overseas markets, including China. Through its NCR unit, it is challenging IBM in large computers. In addition, McCaw Cellular Communications Inc. will now make it a powerhouse in wireless communications.

There's a lesson in all this: By addressing their problems the right way, even very large companies can successfully adapt to fast-emerging markets. They don't have to suffer the crippling self-doubt and financial pain that IBM, Eastman Kodak, and General Motors are going through, as they scramble to escape the past and catch up with competitors. "Giant" doesn't have to mean slow-moving, rudderless, or overly bureaucratic. Or unrewarding: In the past year, AT&T shares have jumped 39%, to 59¾.

But what exactly is this "right way?" How does a $65 billion company such as AT&T thrive in the face of accelerating change? After all, this was America's premier monopoly not so very long ago. It measured product cycles in terms of decades—not the months that one of today's personal computers lasts before it becomes outmoded.

BOLD VISION. In AT&T's case, the right way has largely been Chairman and Chief Executive Robert E. Allen's way. Although a well-honed product of the old AT&T, Allen has moved decisively to prepare his company for the fast-moving, all-digital, multimedia, anytime-anywhere communications market he wants to conquer. In stark contrast with Louis V. Gerstner Jr., IBM's new chief executive, Allen has no problem articulating a strong vision. AT&T intends to build a global network and pump it full of every kind of traffic: voice, data, video, entertainment—you name it.

Granted, AT&T has seen dark days. Divestiture forced it to slash tens of thousands from its payroll. And its repeated attempts to crack the computer business—with its own gear and through stakes in Sun Microsystems Inc. and Olivetti—cost it billions but produced little. Today, the divestiture order seems fortuitous, leaving AT&T trim and focused years before other large corporations. And AT&T can count on strong profits from its long-distance business, an advantage most companies can't match.

Successful operator: Under Bob Allen, AT&T has learned to adapt fast—while keeping a firm hold on long distance

Yet Allen must be credited with acting boldly. In 1989, he reorganize AT&T into a group of some 20 indepe dent business units. In the proces says James Moore, the president GeoPartners Research Inc., a manag ment consultant to AT&T, the compar was forced to think harder than ev about its future. And when that mov raised the classic management dilemn of decentralization vs. the synergies integration, Allen used his person leadership to strike a balance. He s up and now oversees a hal dozen cross-unit teams, whic meet regularly to addres technical and marketing i sues in such emerging fiel as multimedia and visual co munications.

Allen slyly attributes h success as an inside reforme to a "liberal arts educatio [at Wabash College] and m own personal makeup." B he recognized the pressin need for outsiders. "I know don't have all the answers he says. So AT&T has not onl hired top executives fro low-tech companies such Square D Co. and Sea-Lan Service Inc. but has also a quired entire companies: NC and now probably McCaw.

It may be too early to se what AT&T will gain fro those two megadeals and the man smaller ones it has done. But Alle must be given credit for his resolv "He has put his money where his v sion is," says Peter Bernstein, senio analyst at Probe Research Inc., a C dar Knolls (N. J.) consultant. And h has had the courage to risk losing few. That's a lesson more companie might do well to learn.

Information Processing Editor Ve ity reports on technology from Ne York.

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[1]Source: Emerging Stock Markets Factbook, 1992, International Finance Corp. [2]Source: Morgan Stanley Capital International. Rankings are for the 10-year period ended 12/31/92 and are based on return in U.S. dollars. [3]Lipper Analytical Services, Inc. ranked the Templeton Foreign Fund #76 out of 96 funds for the 1-year period ended 6/30/93. Lipper rankings do not include sales charges and may have been different if such charges had been considered. There are special risk considerations associated with foreign investing. Past performance cannot guarantee future results.

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POLITICS

HEALTH REFORM HITS THE CAMPAIGN TRAIL

A Democratic PR blitz will use "every known communication tool"

For most Americans, an evening of dinner-party repartee about health-care reform might sound like a snore. But if the White House has its way, that's how you'll spend your free time this fall—in a Clinton-style wonk-in on how to cure the health system. Unless you live in a cave, it will be hard to avoid the publicity carpet bombing the Administration plans to launch.

President Clinton's Aug. 16 speech in Tulsa to the nation's governors was just the start. In the weeks before and after the plan's expected September release, the President and First Lady expect to take the sales pitch on the road. The White House, along with the Democratic National Committee (DNC), will weigh in with an ambitious National Health Care Campaign. Their objectives: to organize thousands of grass-roots supporters, beam Cabinet secretaries into living rooms, and post truckloads of mail to the masses. "We will never let up," declares Jeff Eller, whose Churchillian vow befits his post as commander of the White House "war room."

LONG HAUL. There are plenty of targets for all this firepower. The Administration has to convince middle-class voters who like their current benefits that reform is a plus, not a minus (table). It must earn support from Republicans who are wary of government intervention and solidify the fractious Democrats (page 35). And the reformers will have to maintain the high-voltage drive for a year or more, until Congress votes. "It will cost a lot of money, and it will be hard to maintain the enthusiasm among organizers," frets a White House official.

Drumming up support from business groups is a top priority. Commerce Secretary Ronald H. Brown and National Economic Council chief Robert E. Rubin will lead a contingent of Administration officials with strong business ties. They'll try to enlist high-profile chief executives nationwide for public endorsements, though none have signed up yet. After that, says one White House of cial, "we're hoping they will share th support with other CEOs."

Cabinet secretaries, who have been sued briefing books entitled *The Ne for Health Care Reform*, have been rected to talk up health reform at eve chance. And Democratic lawmake have received a guidebook from t Democratic Congressional Campai Committee on how to organize lo grass-roots efforts. The book advis them to assign a "health-care field dir tor" to head the campaign and expla how to enlist support from organizatio and "neutralize" the "naysayers."

TOUGH SELL. Because the White Hou can't use federal funds to lobby taxpa ers, the privately financed DNC will p for most of the work. The party plans spend more than $3 million to help bu pressure on members of Congress vote for a plan that contains bitter me cine. Many lawmakers—to say nothi of many of their business constituents will balk at provisions that require e ployers to provide coverage and mo most people into managed-care plans.

Much of the mon will go into an am tious multimedia effo The party plans beam interviews wi senior officials to lo TV stations and crea taped commentary th local radio stations c retrieve by dialingl special phone numb Nationwide pho banks and copious m ings will serve as re forcements. "This v be mass saturation, ing every known co munication tool," sa Catherine Moore, a D spokeswoman.

Meanwhile, the De ocrats are hitting t hustings. The part field organizers about two dozen sta will focus on congr sional districts whe Democratic membe are likely to face st organized opposition uncertain election pr pects. Among the t gets are Californ Florida, Georgia, Lou ana, Michigan, and T as. "Every member have the other s bashing them in t teeth," says one sou

For Clinton, winning over key CEOs is a top priority

PITCHING THE PLAN

Think health reform is going to hurt? Has Dr. Bill Clinton got a deal for you. Here are the talking points the President plans to emphasize.

MORE SECURITY	Layoffs, job changes, or preexisting health problems will no longer endanger coverage.
BETTER BENEFITS	A comprehensive health package for all citizens will include preventive care and home care for the elderly.
LESS RED TAPE	Plan cuts paperwork for patients and doctors.
LOWER COSTS	Competition among health plans will slow the steep rise in costs for employers, patients, and government.
A SMALLER DEFICIT	Controlling health costs will boost funds available for education, job training, and other programs.

iliar with the DNC's plan. "It helps n if they know someone is trying to nter that."

he DNC hopes to enlist foot soldiers rass-roots organizations that support plan. Among likely recruits: senior ens' groups, unions, and consumer anizations. In thousands of communi- these groups will conduct town tings, gather petitions, speak on lo- television and radio, and hold "house ies" when the President makes tele- d addresses.

The Democrats will also try to draft the previously uninvolved. The party is considering establishing an "activist network" in which citizens who call an 800 number will learn how to disseminate information to their friends and neighbors. "It won't be like . . .—'Oh no, the health people are coming,'" vows one official. "But we expect that everyone will be talking about health care." The Clintonites also plan to apply a lesson they learned from the bitter but successful struggle to pass the budget: Keep the heat on, and confront the opponents early.

And they're singing the same hymn that accompanied the Battle of the Budget. If we can just get our message to the masses, the Clintonites say, they'll learn to love it. But snappy slogans alone won't do much if Clinton can't deliver a plan the public wants. If he fails that test, the dinner-party chitchat on health care could turn into a national gripe session real fast.

By Susan B. Garland in Tulsa

SNICKERS AND SNIPING AT CLINTON—FROM THE LEFT

ete Stark has been working on health-care reform for most of his 21 years in Congress. As airman of the House Ways & Means mmittee's health panel, the Oakland alif.) Democrat sits at the center of alth debates. Now, a President from own party is launching a campaign overhaul the medical system.

So Stark is ecstatic, right? Well, e's what he thinks about the White use proposal: "It's Alice in Wonder- d." Stark dismisses President Clin- 's plan to expand coverage without jor new taxes, and thinks the cost atrols will be ineffective. "The Ad- nistration seems to think the health- e fairy is going to leave a plan un- the President's pillow," he says.

Stark and his allies—advocates of a ngle-payer" system, in which the vernment basically pays all health s—might just be the Mad Hatters health reform for Clinton, confusing l confounding him at every step. Al- ugh they would seem to be his natu- backers, the liberals may box him demanding concessions while the esident fends off attacks about cost l bureaucracy from the right.

W STRENGTH. Clinton has onemore advantage: He's late to the tea par- Although single-payer supporters re once dismissed, they mobilized ile the White House delayed on alth reform. A single-payer bill is w backed by 87 House and 5 Senate sponsors and the nation's largest work of grass-roots activists. Their ver worries business groups who nt a market approach. "A year ago, gle-payer was dead," says Richard Smith, health policy director of the sociation of Private Pension & Wel- e Plans. "Now, those folks are real yers in the game."

And aggressive players at that. Sen- r Paul D. Wellstone (D-Minn.), chief ate sponsor of the main single-pay- bill, sets stiff conditions for his sup- t. He wants to bar large companies from running their own benefit plans, stop health plans from limiting patients' choice of doctors, and require immediate universal coverage. "If Clinton has made major compromises with Republicans and business, we'll be out there fighting him," says an aide.

What divides Clinton from his party's most vocal health reformers is the "managed competition" foundation of his package that empowers businesses involved in the delivery of health services. Employers and workers would pay premiums to big purchasing cooperatives. The cooperatives in turn would give families a choice of plans—networks of doctors and hospitals, often organized by big insurers.

Liberals prefer a big-government solution to a market-driven one

Single-payer plans, modeled on Canada's national health insurance and U. S. Medicare, turn the health system over to government, which would use tax revenues to pay doctors and hospitals. And it would control costs by setting pay schedules for specific services.

LESS PAPER. Backers claim the single-payer plan reaps big savings. The Congressional Budget Office, which tends to trust government more than market competition, says price controls and paperwork cuts could give health coverage to all Americans without raising total health-care expenditures. That's the story such groups as Citizens Action tell when they contact up to 65,000 households a day. Still, single-payer has a fatal flaw: It could boost the nation's tax bill by upwards of $500 billion. Supporters say business and families would have fewer out-of-pocket costs, but there's no escaping the tax increase. Clinton summed up single-payer's chances in his Aug. 16 speech to governors: "I don't think that is going to happen."

Hardly a bold rebuke. Indeed, Clinton is carefully courting single-payer fans, who still might come to his side in the showdown. Hillary Rodham Clinton meets regularly with single-pay advocate Representative Jim McDermott (D-Wash.) and his allies. The Administration notes its plan would let states create single-payer programs if they wish. The White House's flirtation with a payroll tax to replace premiums—a move that panicked business—reflected single-payer thinking.

Even so, Clinton can't risk grasping the concept too strongly. To pass his plan, he must work with business—even with Republicans—while persuading his own party that his plan must fly or long-cherished hopes for reform will sink, too (page 51). "The question is, does Clinton have the skill to pull that off without splitting his party in two?" asks Washington health economist Jack A. Meyer. If not, Clinton's hope for health reform could disappear as quickly as a Cheshire cat.

By Mike McNamee in Washington

JOHNNY CRAWFORD/ATLANTA NEWSPAPERS

TRADE

WHY NAFTA JUST MIGHT SQUEAK THROUGH

Business support is solid—and failure would sour relations with Mexico

By most accounts, when the North American Free Trade Agreement finally limps up to Capitol Hill, it will be pronounced dead on arrival. Ross Perot has terrified the public with the specter of U. S. jobs fleeing to Mexico. Even after side agreements to protect workers and the environment were completed on Aug. 13, not a single congressional opponent seemed to have been swayed.

But the obituaries are premature: The battle over NAFTA is one that the Clinton Administration may win. Clintonites and much of Corporate America are rallying behind the accord—not only because trade liberalization is critical to the U. S. economy, but also because Presidential credibility on a broad array of international matters is at stake. "We just can't let NAFTA go down and trash our relationship with Mexico, Canada, and the rest of the Western hemisphere," says Barry Rogstad, president of the American Business Conference.

REBUTTAL. U. S. companies see huge potential in a Mexican market that already is gobbling up American goods. Excluding parts shipped to Mexico for assembly and resold in the U. S., merchandise exports heading south have increased by 228% since 1986. This has occurred even as Mexican tariffs on U. S. goods remained 2.5 times greater, on average, than U. S. tariffs on Mexican goods. Argues Goodyear Tire & Rubber Co. Chairman Stanley C. Gault: "This is an unparalleled opportunity for U. S. business, not for moving south of the border, but for increasing U. S. exports."

That's why Harry Featherstone, chief executive of Will-Burt Co., a $24 million manufacturer of telescoping towers, based in Orville, Ohio, plans to intensify his contacts with lawmakers to assure NAFTA's passage. Will-Burt's future growth hinges on exports, and Featherstone sees Mexico as a key market. By eliminating Mexican tariffs, NAFTA would "make us more productive and add more jobs" in the U. S., he says.

If NAFTA is to pass, its supporters will need to rebut its opponents' rhetoric—and they have a good chance.

Take Perot's claim that the low wages paid in Mexico will suck jobs out of the U. S. economy. "It's hard to find an issue about which there are more myths," says Treasury Under Secretary Roger C. Altman. Most studies show that some U. S. workers, perhaps 400,000 over 10 years, would be d- placed. But they al predict that Mexic workers with mo money in their pocke would increase their d mand for U. S. expo of autos, computer and financial servic among other produc Indeed, demand for t Big Three's autos projected to jump by billion annually. Su growth would crea more than enough jo to offset the losse NAFTA is expected strengthen the U. S. e port surge, which a cording to the Co merce Dept. h already turned a $ billion trade deficit w Mexico in 1987 to a $ billion surplus in 199

FENCE-SITTERS. Conce that Mexico's lax pol tion enforcement w drive business sou also is overblown, s porters say. Michael Walker of the Fras Institute, a think ta based in Vancouv (B. C.), notes that, average, polluti abatement amounts 2% of a company costs. "That simply is enough to cause a fi to move from Ohio Guadalajara," he say

Boosting prospe for NAFTA is the GO desire not to be blam for Washington's gr lock. On Aug. 18, S ate Minority Lead Bob Dole (R-Kan.) said a majority Republicans would vote for the pact.

At the same time, the President wooing fellow Democrats. To win ov fence-sitters such as Majority Lea Richard A. Gephardt (D-Mo.), the Adm istration is preparing a legislative pa age that will include worker-retraini assistance and provisions to alleviate c ruptions to potential losers such glassware makers and sugar growers

The deal is no panacea for the U. but it may be essential in an increasing export-driven world. In the end, that gument may just be enough to pull t odds around in NAFTA's favor.

By Douglas Harbrecht in Washingt William C. Symonds in Toronto, and G Smith in Mexico City

LINING UP TO FIGHT FOR NAFTA

How various industries stand on the North American Free Trade Agreement

VERY STONGLY PRO

FINANCIAL SERVICES Increased Mexican demand could drive up the revenue of U.S. banks and insurance companies by as much as 15%

PRO

ELECTRONICS Mexican demand for U.S. computers and software is expected to climb

AUTO INDUSTRY Despite an outcry by U.S. unions, the Big Three and their workers could be helped: Mexican demand for autos is expected to jump by $1 billion a year

MIXED

AGRICULTURE Production of vegetables, sugar, and citrus will shift to Mexico, displacing farm laborers. But Midwestern corn, soybeans, and grain farmers could benefit

AGAINST

TEXTILES Cheap labor and low production costs in Mexico will add to woes of a shrinking U.S. industry

DATA: U.S. INTERNATIONAL TRADE COMMISSION, CONGRESSIONAL BUDGET OFFICE, U.S. COMMERCE DEPT.

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ENVIRONMENT

THE WORM IN DUPONT'S VICTORY

It won a suit over one pesticide—now it has to worry about another

DuPont Co. Chairman Edgar S. Woolard Jr. proclaimed victory on Aug. 12 when he disclosed that the company had settled the first big test case of alleged crop damage by its Benlate DF fungicide for $4.25 million. His reasoning: Even with additional legal costs, DuPont paid only a fraction of the more than $430 million that plaintiffs in the Columbus (Ga.) case had sought.

Woolard's victory could prove to be Pyrrhic, though. The trial provided millions of documents for nearly 500 other litigants who allege that Benlate damaged their crops, too. Worse, it has escalated worries about another family of DuPont chemicals, ultrapotent weed-killers called sulfonylureas, or SUs.

"CURE-ALL." DuPont would suffer a hard blow if the culprit turns out to be SUs. The herbicides account for $650 million of its $1.9 billion in annual agricultural chemical sales, vs. Benlate's $100 million. While DuPont insists the two chemicals never mix in the Belle (W. Va.) factory where both are made, the Benlate plaintiffs in Georgia contended that damage to their crops may have come from Benlate contaminated by SUs—possibly in DuPont's plant. Indeed, farmers in Colorado and Washington State complain in lawsuits that SUs damaged alfalfa and other crops. And the Environmental Protection Agency has mounted what one official calls an ongoing probe into SU's effects.

Some farmers are already convinced the chemicals are dangerous. "We kept trying to figure out some way that it was our fault, or Mother Nature's," says Laurie Wishkoski, a grower in Washington who believes that SUs used by a nearby wheat farmer drifted over and stunted her cherry, apple, and nectarine trees. "But the [Washington State University] researchers could duplicate those yellow spots only with SUs." DuPont says her problem may come from chemicals other than SUs.

The reputation of SUs has fallen far. When DuPont developed them in 1975, "they were thought of as a cure-all," says Robert J. Taylor, EPA product manager in the pesticide registration di- sion. Indeed, since 1982, the compa has promoted SUs as safer than salt a now sells them worldwide under at lea 23 trade names, such as Missile, Ou and Harmony. DuPont says their tox ity to people is "negligible" and has impact on commonly treated crops li wheat and rice (table). That's becau SUs inhibit an enzyme found in wee but break down harmlessly in cro They're very potent: A third of an oun per acre clears a field of weeds.

Even DuPont concedes that probler can arise if SUs are mishandled or lowed to drift by air or water. In fact, one memo released in the Georgia tri a DuPont official warned SU workers 11 ways contamination could occur. Su documents are part of what Florida la yer Louis Vendittelli calls a "treasu trove" of papers that will make his cas for 30 growers alleging Benlate damag And there is some evidence to suppo claims that only traces of SUs can cau damage: EPA officials say effects can seen on cherry trees after sprayi them with $^{1}/_{500}$ of the approved dose the SU Glean.

DuPont has already lost one suit volving SUs. Last fall, the Colorado S preme Court upheld a $4.8 million jud ment against DuPont by four far families who claimed that they had us aninsecticide tainted with SUs. DuPo doesn't dispute that the SU produ Oust, showed up in the farmers' fiel but insists it didn't get there throu contamination.

DRIFT CONTROL. DuPont has won so SU battles, too. The company prevailed a suit that was brought last fall farmers in Washington State's Badg Canyon area, near Wishkoski's far The growers had claimed that whe farmers' SU products had drifted on their crops and damaged them, but Yakima County Superior Court jury s ed with DuPont. The plaintiffs are a pealing, and the state Agriculture De has established a task force to consid further limiting or even prohibiting S in certain areas.

DuPont maintains th chemical drift can be ma aged and is training farme to control it. It will likely a vise the task force.

Still, some growers rema leery. If DuPont can't ste their complaints, one day i SU troubles may make i woes over Benlate look li small potatoes.

By Joseph Weber in Philad phia and Mary Beth Regan Washington, with Scott Bro stein in Columbus, Ga.

DUPONT'S SULFONYLUREA

PROS...	CONS...
HIGH POTENCY As little as one-third an ounce per acre stops weed growth in hours	**TENDS TO DRIFT** Wind or groundwater may carry it far from target areas
LOW HUMAN RISK Danger to humans is "negligible" and no residue to pollute the food chain	**TOXICITY** May damage sensitive crops, such as fruits, trees, and shrubs
MANY APPLICATIONS Protects rice, wheat, barley, soybeans, and kills roadside weeds	**HARD TO DETECT** Effective at a few parts per trillion, so difficult to test for

DATA: DUPONT CO., ENVIRONMENTAL PROTECTION AGENCY

N THE LINE OF FIRE
IT THE TEAMSTERS

on Carey fights UPS—and union rivals out to undermine him

Back in the old days, contract talks between United Parcel Service Inc. and the International Brothhood of Teamsters were predictable. nion bosses made noises about fighting liantly for their members—and then t deals with UPS, telling their 165,000 'S members to swallow hard. But this ne, reform-minded Teamsters Presint Ron Carey is leading his first gound with the union's biggest employ. And he's having a heck of a fight tting more out of the company than s lackadaisical predecessors.

Carey is pressing UPS on a longtime re spot: stringent work rules that irk any union members (table). But he's so battling a whispering campaign by l-guard members of s own union who aim that he had mob s in the past—even ough Carey was the 'st Teamsters presint ever to campaign an anti-Mafia platrm. The result: an exosive situation that s dragged negotians past the July 31 ntract expiration te. Carey has lined up 0 million in loans to lster the strapped ion's strike fund. He ows accepting a weak al, especially in his 'st major contract nce taking office, uld undermine his atus as a reformer.

To succeed, Carey s to get UPS to lighten up on its work les—no small task. Company officials, no declined to discuss the talks, acowledge that the UPS management stem is demanding. However, they are that this makes the company highly ficient and allows it to fend off the es of largely nonunion Federal Exess Corp. while still paying high ages—an average of $14 an hour for 60,000 drivers. Still, the stress on employees is great, workers say. Indeed, a cent union-funded study by Illinois acemics found that UPS drivers' job-inced stress levels are higher than 90% the work force.

Carey, who headed a Long Island .Y.) local of mostly UPS workers before winning the Teamsters presidency in 1991, hopes to begin changing this. For instance, he wants UPS to alter what even the company agrees is a "guilty-until-proven-innocent" policy, which allows workers to file grievances only after a supervisor has disciplined or even fired them. He also wants to limit the so-called ride-along, which is UPS lingo for supervisors who accompany drivers and clock their every step. Another top issue: management's demand for the right to ship long-distance packages on non-UPS trucks, including nonunion ones.

On top of all that, he's resisting UPS' efforts to consolidate health-care and pension plans. Currently, the company pays into dozens of local Teamsters-run plans that also include truck drivers from other companies. UPS wants to pull out of the system, claiming it could save on medical costs while boosting UPS workers' pensions. Doing so, however, might endanger the benefits of older drivers from companies such as Roadway Services Inc.

INHERITANCE HURDLES. Carey opposes the UPS plan, as do most of the 40 local officials on the union's UPS bargaining committee. But Carey's supporters acknowledge that many committee members—a lot of them his opponents—don't trust him to go to the mat if UPS floats the plan directly to union members. "This is causing absolute civil war here," says one Teamster insider.

Indeed, Carey is under intense pressure to be militant. Opponents note that the former $45,000 a year local leader will inherit $350,000 from the sale of UPS stock that his father, a former UPS driver, bought in the 1930s. Carey says not even his mother knew about the stock, which is now being sold by his father's estate so the proceeds can be distributed to Carey and five brothers.

Carey says the windfall won't affect his stance in the talks. But the story has been spread by allies of R. V. Durham, a North Carolina Teamsters leader who ran against Carey. Rivals also have repeated allegations—first aired by unnamed federal investigators in a June *New York Times* article—that Carey had dealings with the Lucchese crime family. Carey denies the charge, which included no specifics.

Even friends say that Carey, who has railed against Teamsters corruption for years, is showing the strain. He lashes out at his own people in meetings and accuses UPS bargainers of leaking the stock story to undermine him—a charge UPS denies. Still, Carey promises to continue his tough stance. "Now UPS is faced with a union leadership that's not going to operate in the interests of Corporate America," he says.

How much can Carey deliver? The union can't afford a long strike. It's in the red, forcing Carey to borrow $80 million from other unions. At $30 million a week, a walkout would be devastating. "We'd have to be brain dead to call a strike," says one Carey supporter. Indeed, Carey has been forced to plan a special convention to request a dues hike, hardly a popular idea.

The upshot: Carey may get a better UPS deal than previous union leaders. But the price he pays will be steep.

By Aaron Bernstein in New York

THE TEAMSTERS' GRIPES ABOUT UPS

TOO MUCH SUPERVISION

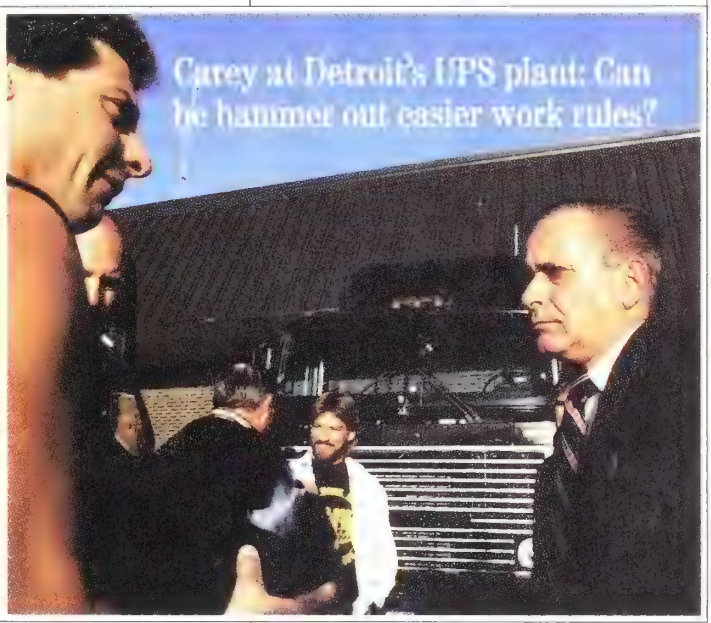
The union wants to limit the number of times supervisors can ride with delivery drivers to clock their movements and check their efficiency

UNFAIR GRIEVANCE PROCEDURE

Supervisors now can unilaterally discipline or fire employees, who then must appeal the decision

OUTSOURCING OF JOBS

The union opposes UPS's plan to use trucking outfits to ship long-distance packages, which currently travel on trucks through the company's local delivery network



Carey at Detroit's UPS plant: Can he hammer out easier work rules?

ALEX GUELARDA-MATTX

INDUSTRIES

PROFITS AHOY!

Deep-sixing the luxury tax puts the yacht industry back to work

FINISHING OFF A CABIN CRUISER AT NEW JERSEY'S VIKING YACHT

Ken Fabry usually buys boats more often than most people buy cars—one every couple of years. But the candy distributor from South Florida has held on to the Timberline II since 1989—largely because Congress slapped a 10% excise tax on boats over $100,000 two years ago. Now, the tax is being repealed under President Clinton's new budget. And Fabry is loosening his purse strings: He just ordered a 70-foot Viking yacht for $2 million. "If I had to pay the tax, I wouldn't have bought it," he says. "I don't care how much you spend for a boat, $190,000 in taxes is ludicrous."

Boat manufacturers are shouting a hearty "Aye-aye." They blame the luxury tax for a devastating sales slump. But with big spenders such as Fabry returning, the industry expects a comeback. "We think there is going to be a gradual and continual growth in sales for the new-boat industry," says Robert T. Healey, co-owner of boatmaker Viking Yacht Co. in New Gretna, N. J.

AUTUMN GOLD. Indeed, for the first time in three years, big-ticket yacht sales are picking up. Dealers and manufacturers from Florida to Minnesota say sales are up. And they expect brisk business at an array of fall boat shows. "Maybe it's not like the old days, but I think there is an upward movement," says Alvin Wagner, owner of Jefferson Beach Marina in St. Clair Shores, Mich. Minnetonka Boat Works of Wayzata, Minn., sold six large boats last month, its first big-boat sales since late 1992.

The yacht industry knows, however, that it faces a long voyage back to prosperity. The winding down of the free-spending 1980s combined with recession and the luxury tax keelhauled the top end of the boat market—crafts costing more than $100,000. Almost no boat builder emerged unscathed. From a 1987 peak of 16,000, sales of high-end boats dropped to 9,100 in 1990. With the luxury tax adding to the headwind, sales plunged to just 4,200 last year.

The drop decimated the boat building industry. Since the industry's peak, employment has fallen a third, to 400,0 jobs, and boatmakers largely blame t tax. "The purpose [of the tax] was to t the rich and their toys," says Republic Senator John H. Chafee of Rhode Islar a big boat building state. "What it rea did was hurt the toymakers." Chafe state recently repealed its 7% sales-ar use tax on boats.

Manufacturing is already bounci back. Ocean Yachts Inc. in Weekstow N. J., and Blackfin Yacht Corp. in F Lauderdale, Fla., both report increas orders in recent months. And Viki Yacht is rehiring: By January, it m have 600 on its payroll. That's up fr only 65 in 1992—though way below t 1,500 it employed in two plants in 19 If more Ken Fabrys decide to trade their old yachts, the boat industry m soon be running with the wind again.

By Lori Bongiorno in New Yo

REGULATORS

A RED FLAG ON CRUISE SHIPS

Their rising popularity raises concerns about fires and accidents

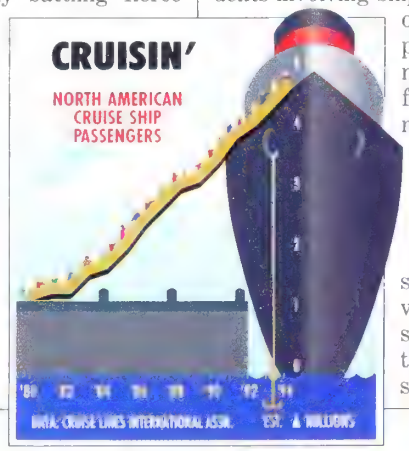
Basking in the Carribean sun, tall drink in hand, breeze in their faces, cruise-ship passengers typically don't stop to wonder if their ship has a sprinkler system. The promise of worry-free escapism, after all, is one reason more than 4.5 million passengers are expected to board liners at U. S. ports this year—triple the number that set sail just a decade ago.

Safe as the liners seem, though, a host of U. S. and international regulators are cracking down. The result: new international safety rules and a U. S. General Accounting Office report, prompted by a 1990 ship fire, that says safety standards should be even higher. Recently, the U. S. Coast Guard has responded to the GAO report with plans for better training for ship inspectors and improved data collection to identify repeat safety violators.

All the attention has the cruise industry in a tizzy. Already battling fierce competition and margin-pinching discounting, the industry doesn't dispute the recommendations—but it's not happy, either. Royal Caribbean Cruises Ltd. will spend an estimated $2 million to $4 million per ship to retrofit its nine liners to comply with the new sprinkler requirement, says David H. Whitten, director of quality assurance for RCCL. Th doesn't include revenue lost while safe modifications are made.

Cruise companies argue that they c take care of themselves. In fact, the G acknowledges that no major inciden have occurred involving ships operati from U. S. ports in recent years. But cites several examples of fires or ac dents involving ships that had previous operated from U. ports. The most pron nent: an April, 199 fire aboard the Scan navian Star in Norw gian waters.

Under regulatio adopted in Ma 1992, cruise shi built prior to 198 such as the Scandin vian Star, must ha sprinklers and a ce tral smoke-detecti system by 1997. Mo



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FUJITSU

COMPUTERS, COMMUNICATIONS, MICROELECTRONICS

't now. Ships built after 1980, which ıerally use more fire-retardant mate- s and adhere to other recent safety ndards, have until 2005 to comply.

'hat's not enough for the National ınsportation Safety Board, which for .rs has argued that countries in which ships call should have more clout in ting and enforcing safety standards. the 139 cruise ships operating in U. S. ports, 137 are registered, or "flagged," with foreign countries. Former NTSB director James Kolstad, who left the agency last July, had been pushing for legislation to give the Coast Guard, which already inspects ships at least four times a year, more oversight authority.

Congress responded in November, 1992, giving the agency full power to enforce safety standards on cruise ships. It's a power the Coast Guard hasn't hesitated to use. In June, the Sun Fiesta set to sail for a one-day cruise out of Fort Lauderdale's Port Everglades. But when the ship flunked a safety drill, the Coast Guard kept it in port until the deficiencies were corrected. Look for more docked liners in ports all over.

By Gail DeGeorge in Miami and Seth Payne in Washington

SONALITIES

IDDING FAREWELL TO A GURU –AT $395 A POP

ɜeph Juran, 88, still packs 'em in—and then wows 'em

n this rainy Monday morning, the quality movement is very much alive and well in Mahwah, . Eighty-eight-year-old quality guru .eph M. Juran has arrived for the lat- stop in his "Last Word" speaking .r, and the hotel conference room is :ked. Fans are eagerly pulling out ir credit cards to buy the $25 framed .ographed picture, the $50 lucite bow- paperweight memento and the $20 ıvas tote bag. Others queue up for :ographs.

3y the end of 1994, Juran l have brought his show to re than two dozen cities. ; his last public tour before retires to write his mem- s, and acolytes are dishing : $395 apiece to attend the ents, which boast the sort farewell hoopla normally ıerved for famous ball play- ; and rock bands. At the ıhwah event are some 325 :husiastic followers, from nerican Express Co. manag- ; to representatives of the ıification Theological Semi- ry. American Cyanamid Co. patched 48 people to the ture, American Telephone Telegraph Co., 22.

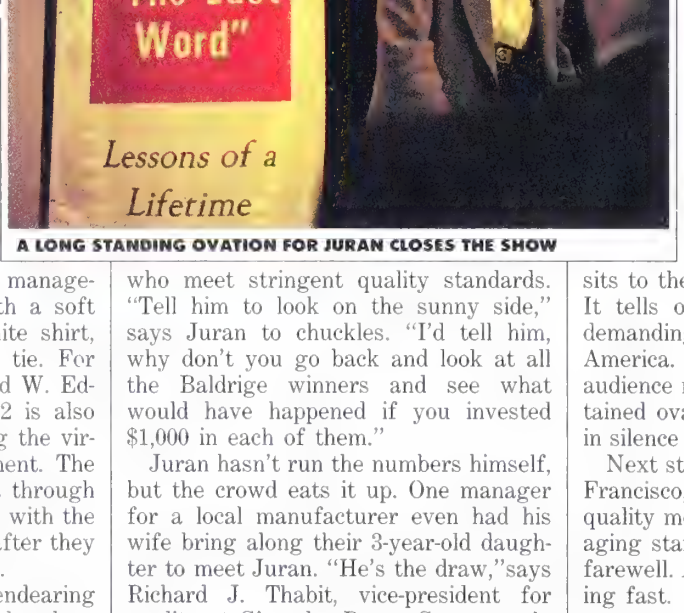
What they see and hear is a manage- ent legend, a small man with a soft ice in a tweed jacket, a white shirt, d his trademark black bow tie. For ɔre than four decades, he and W. Ed- ırds Deming—who at age 92 is also ll active—have been extolling the vir- es of total quality management. The ɔvement they founded swept through rporate America in the 1980s with the rce of a hurricane—decades after they ɔn a loyal following in Japan.

Juran proves himself an endearing d durable guru. He begins the show promptly at 8:30 a.m. by flashing the first of more than 150 slides on a huge screen to his right. Ceiling-to-floor banners frame the screen with Juran's image and "The Last Word" emblazoned over bright red backgrounds.

SUNNY SIDE. On the pulpit, the master is witty and disarming. One manager asks him what he should do when his vice-president for finance brings him a newspaper clipping on another Malcolm Baldrige Award winner gone bad. The now famous award is given to companies who meet stringent quality standards. "Tell him to look on the sunny side," says Juran to chuckles. "I'd tell him, why don't you go back and look at all the Baldrige winners and see what would have happened if you invested $1,000 in each of them."

Juran hasn't run the numbers himself, but the crowd eats it up. One manager for a local manufacturer even had his wife bring along their 3-year-old daughter to meet Juran. "He's the draw,"says Richard J. Thabit, vice-president for quality at Givaudan-Roure Corp., a subsidiary of Hoffmann-La Roche Inc. "I thought it would be the last chance to see and hear him."

Juran says he is flattered by the attention, even surprised by it. He's also optimistic about the future of the quality movement, despite frustration voiced by managers in the room. Over the stuffed chicken breast, hospital administrators grouse that doctors are resisting efforts to install quality management. Another manager complains his senior executives are too preoccupied with internecine politics to concern themselves with changing the culture of the company. No matter: "The good news is we have a number of clear success stories," Juran says, pointing to Motorola, Milliken, Xerox, and AT&T. "They've proven that American companies can become world-class leaders in quality." Far from stalling, he insists, the quality movement is going to spread still further.



A LONG STANDING OVATION FOR JURAN CLOSES THE SHOW

LAURIE SPARHAM-MATRIX

As for reengineering, a management concept that is gaining increasing attention, "It's just a new label for something that's been around for a while," he says. "If I want to be mean, I'd say we have situations where some people want to be on top of a hill. Alas, every hill has a king. What is more logical than to create a hill?"

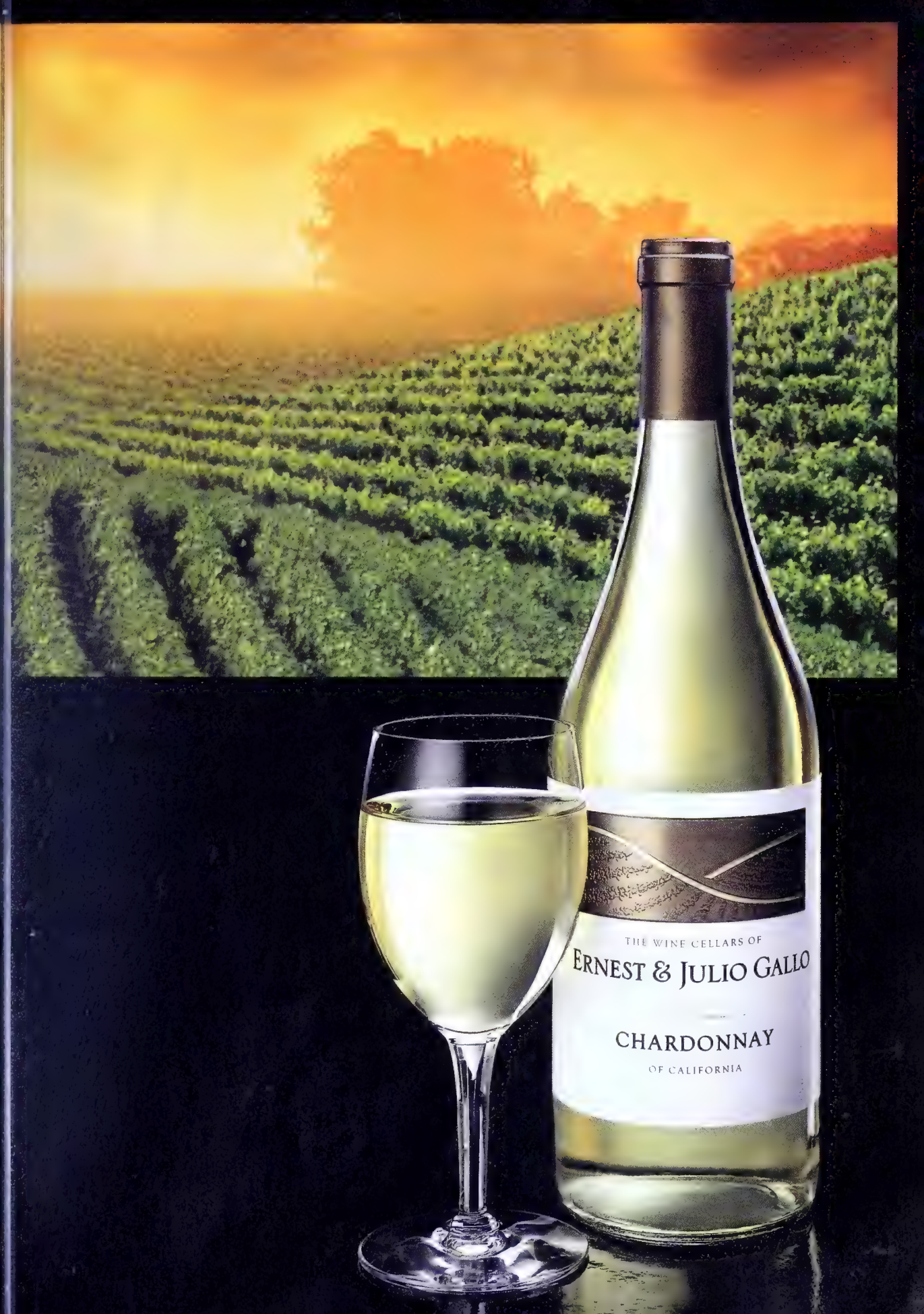
At 5 p.m., some 153 slides, 75 audience questions and nearly a half dozen "video quality minutes" later, this king is through for the day. The house lights dim, and a brief video documentary unfolds on the screen as Juran sits to the side under a single spotlight. It tells of his humble beginnings, his demanding father, and his love for America. When the video is done, the audience rises to give Juran a loud, sustained ovation. The quality guru stands in silence as the spotlight fades to black.

Next stops: Philadelphia, Chicago, San Francisco, Toronto, and Atlanta. The quality movement's answer to baseball's aging star Nolan Ryan, Juran is saying farewell. And the lucite bow-ties are selling fast.

By John A. Byrne in Mahwah, N. J.

Take a new look at Chardonnay.

E. & J. Gallo Winery, Modesto, CA


THE WINE CELLARS OF
ERNEST & JULIO GALLO
CHARDONNAY
OF CALIFORNIA

EDITED BY KEITH H. HAMMONDS

JUST WHAT THEY NEED

Capitalism almost guarantees there will be a bottle of cola at every street corner around the world. Sure enough, as trade barriers and political walls tumble, Coke and Pepsi are racing to supply emerging markets with The Real Thing and The Right One. Below, capital investments for soda production and bottling announced recently:

	PEPSI	COKE
	MILLIONS OF DOLLARS	
CHILE	$310	$100
CHINA	7.5	250
CZECH REP.	NA	28
HUNGARY	115	59
INDIA	NA	20
MEXICO	750	195
POLAND	[illegible]	300
RUSSIA	NA	65
VIETNAM*	2	25

*Pending removal of U.S. sanctions

DATA: COMPANY REPORTS

KODAK: NOT ENOUGH CROPPING?

▶ Talk about too little, too late. Eastman Kodak's lame duck CEO Kay Whitmore publicly laid out his turnaround plan on Aug. 18. The details: elimination of 10,000 jobs, or 7% of Kodak's work force, and capital-spending reductions producing $1.1 billion in free cash flow by fiscal 1995. But Kodak directors had already deemed his plan too lenient when they voted in July to replace him as chief executive by the end of the year.

Analysts say Whitmore's program is a modest start for the beleaguered $20 billion Rochester (N. Y.) photography and chemical behemoth, but it may not slash nearly deeply enough. Smith Barney, Harris Upham analyst Peter Enderlin says investors expect Whitmore's successor to push for an additional 5,000 to 10,000 job cuts and to try to boost cash flow even more.

CONTINENTAL HITS A BIG AIR POCKET

▶ No smooth flying in sight for Continental Airlines. On Aug. 16, the carrier reported a $24.4 million loss for the two months since emerging from its second bankruptcy. The carrier had predicted a small profit, but fare-discounting took its toll. The $5 million in legal fees Continental and Northwest spent in an unsuccessful antitrust suit against American Airlines didn't help, either. Continental will lighten its load by laying off 2,500 workers, halting service to nine cities, and retiring 30 older planes.

MORE MIGRAINES AT BAXTER

▶ The aches and pains at Baxter International won't go away, and some big investors are eager for a cure. In March, Baxter admitted violating a U. S. law prohibiting support of the Arab boycott of Israel. Now, the Veterans Affairs Dept. has suspended Baxter from bidding on federal contracts for a year. The VA's beef: Baxter salespeople allegedly misled VA hospitals from 1990 to 1992. Baxter says it thought the purchasing complaint was resolved two years ago and will fight the suspension. Meanwhile, the California Public Employees' Retirement System and other big shareholders are questioning Baxter's management controls.

OTHER PEOPLE'S MUMMY

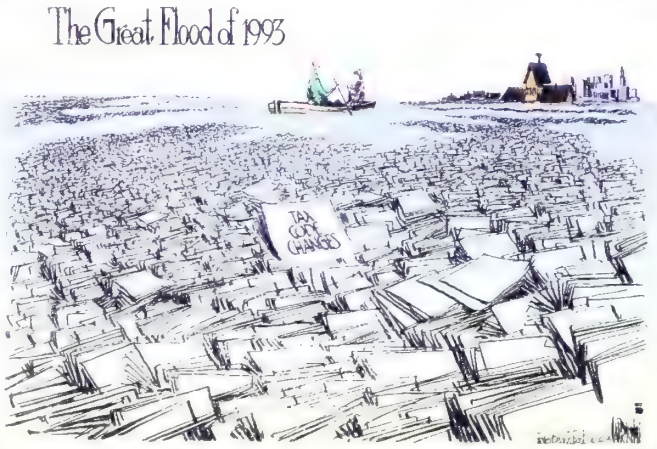
Come Oct. 15, Circus Circus Enterprises will unveil the Luxor, its $375 million casino. Even by Las Vegas standards it will be striking: a 350-foot pyramid with 2,526 guest rooms, 10 river barges on an indoor Nile, and a reproduction of King Tut's tomb—plus 100,000 square feet of card tables and slot machines.

Then, just to make sure no one drives by without noticing, there's the spotlight, shooting 10 miles into the sky from th pyramid's peak. At 40 billion candlepower, it's visible from L Angeles, and air passengers overhead can read a paper by i light. The Federal Aviation Administration O. K.'d the gia lamp, noting it won't interfere with landings at Vegas' McCa ran International Airport. Is it worth the power drain? Accor ing to Egyptian legend, upon their death pharaohs ascended light to reunite with the gods. Now, the thinking goes, th gods can connect with Luxor's gambling faithful. Good luck

EQUAL TIME FOR IGNACIO LOPEZ

▶ José Ignacio López de Arriortua, now a top executive with Volkswagen, responded to BUSINESS WEEK's report on his tactics while purchasing chief at General Motors ("There's another side to the López saga," Aug. 23), but not in time to be included. In an Aug. 12 statement received the day after BUSINESS WEEK went to press, López says: "I strongly reject these statements, which are again pa of a dirty and unfair ca paign against my person."

BUSINESS WEEK reporte that López and his aides fr quently reopened supplie contracts, then exaggerate competitors' bids to force bi down. Suppliers also charge López with sharing their co fidential information with vals. López says "we respec ed all the contracts in place and "we have not taken ar given to competitors any co fidential, proprietary or secr information." GM purchasin employees, he says, acte "with strict and ethical rules.



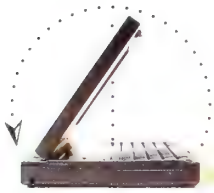
BOEING WILL PILOT THE SPACE STATION

▶ Chalk up a big one fo Boeing. On Aug. 17, NAS gave it sole control of the $2 billion space station projec But can Boeing keep cost within the stratosphere? Th original price tag was $30 bi lion, but some $9 billion ha already been spent, an Boeing is supposed to kee future outlays to $10.5 billior The troubled station is sche uled to be in orbit by 200 Boeing, which already has $3.1 billion space station cor tract, still must hash out th fee for its new role.

It sits, lies down, and does back flips.

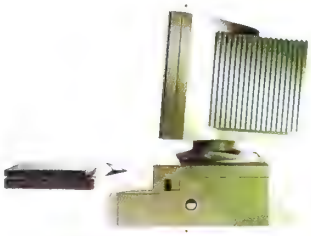
Good

The most flexible screen ever seen



It opens flat up to 180°

Or flips around in just seconds



Swivel, pivot or "Dancing Light" your way to better computing

oy.

The UltraLite® Versa™ notebook gives new meaning to the term "faithful companion."

Versa functions as a pen based tablet to enter notes or data

The reversible screen makes presentations a snap

The UltraLite Versa is truly a breed apart. It's versatile and adapts easily to meet your changing needs, whatever and wherever. For example, switch from a mono to color screen, or put in more hard-drive memory. And despite its heavy-duty technology, the Versa weighs as little as 6 pounds.

Then there's the most sophisticated and flexible display on the market. Use it as a basic notebook, flip it around for presentations, or use it as a pen-based tablet. Plus, Versa's screen provides sharp contrast and brilliant graphics, monochrome or color.

With up to 10 hours of battery life, the one thing it won't do is play dead.

Yes, the Versa notebook knows a lot of tricks. Its i486™SL processor is fast and powerful, yet conserves power. Simply swap the floppy drive for an extra battery, doubling battery life.

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Using thin, credit-card-sized cards, you can send and receive faxes, talk to your network, or ensure secure data storage. And for advanced, real-time mobile communications, Versa is even ready for wireless and cellular connectivity and also incorporates the newest PCMCIA technology.

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The UltraLite Versa is the first of a new series of computer products from NEC designed to work together with enhanced functionality and advanced ergonomics

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- Optional secondary battery: for a total of 5 to 10 hours (color) and 8 to 12 hours (mono)

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EDITED BY HOWARD GLECKMAN

CONGRESS: WHY THE CENTER MAY NOT HOLD FOR CLINTON

With self-described "New Democrat" Bill Clinton in the White House, moderate and conservative Capitol Hill Democrats started 1993 with heady optimism. But this year has become a time of bitter disappointment for them. Squeezed between the liberal wing of their own party and the bomb-throwing partisanship of conservative Republicans, moderate Democrats have become fringe players. Consider what happened in the battle of the budget. Moderate Democrats thought Clinton's fiscal package contained too many taxes and too few spending cuts. Their own alternative was blocked from reaching the House floor—by the party leadership. But most of the dissidents ended up voting for the Clinton plan anyway—trading their votes for a promise to pursue future spending reduction. "As long as they can be splintered off, they can be marginalized," warns Democratic Leadership Council President Al From, spiritual adviser to the New Democrats.

THIRD BLOC. The experience left the centrists frustrated. Indeed, one of their leaders, Representative Timothy J. Penny (D-Minn.), just announced his retirement at age 41. The leadership pursues "a left-of-center solution to every problem," gripes Penny. He and about 40 like-minded Democrats are using the summer recess to devise a plan to save Congress from both partisan gridlock and leftward drift. Their goal: Control a bloc of centrist votes by building coalitions with moderate Republicans—who have also been wandering in the political wilderness of late. The prospect appeals to some GOP moderates. "People are mad at both parties," says Representative Steve Gunderson (R-Wis.). "If the Republicans refuse to play, we move the Democrats' agenda to the left."

PENNY: RETIRING IN FRUSTRATION

The Democratic outsiders have targeted some key elements of the remaining Clinton agenda, including crime, welfare reform, "reinventing government" initiatives, and future spending cuts. Even on the key issue of health care, where Clinton is alienating the left, the moderates worry that the end product will be too burdensome for business.

They vow to play a key role in each, but haven't decided how. Dissident Democrats have teamed with Republicans in the past—notably in the 1981 "boll weevil" budget revolt—but this time the policy gap is bigger. And a coalition threatens the power base of ideological ayatollahs in both parties, who would rather fight political holy wars than pass bills. Says Carleton College political scientist Steven E. Schier: "Both congressional parties, for their own partisan reasons, are doing whatever they can to vacate the political center."

But the centrists, who have been moderate in both policy and style, now may be ready to play the kind of brinkmanship that the Congressional Black Caucus has exploited successfully. The test may be health care. "We've tried to keep these disagreements within the family," says Penny, "but if the moderate conservatives feel they have not been treated fairly, it won't take much for them to join the Republicans and vote 'no.' We may have to defeat one of their proposals to get their attention."

VITAL MARGIN. From says the centrists must unite around proposals such as the managed-care plan of Representative Jim Cooper (D-Tenn.). "If they all rally behind a specific plan and work with their Republican friends, they can provide the margin of victory," From says.

Many Democratic moderates believe that in his heart, Bill Clinton knows they are right. And they are convinced that if they apply enough pressure, Clinton will return to his New Democratic roots. After criticizing the GOP for failing to offer specifics, they must come up with alternatives. Trouble is, they still haven't figured out what those are.

By Richard S. Dunham

CAPITAL WRAPUP

FUND-RAISING

The Republican Party is quietly hitting up its fat-cat donors for more cash, and some are balking. BUSINESS WEEK has learned that earlier this year, the Republican National Committee asked Team 100 members—about 100 supporters who give $100,000 during a four-year Presidential cycle—to up the ante by $50,000 this time around. That was too pricey for some, considering that the GOP doesn't hold the Presidency. When a Republican was in the White House, the RNC at least could pamper elite donors with glitzy perks, from Presidential receptions to Cabinet briefings. "You don't feel as eager to give more when you've just lost an election," says one Team 100 member from the East Coast.

RNC officials at first denied they were asking top donors for more money. Then they changed their story, claiming that the Team 100 members had voted in June to pony up more to support races during non-Presidential years. But several Team 100 members said that they knew of no such meeting and that they were asked for more money long before June. An RNC spokesman says there are only "a few disgruntled folks" in Team 100, but other GOP sources disagree. "They just keep asking and asking until you run out," complains one member.

LEADERSHIP

When word reached Capitol Hill in mid-August that House Minority Leader Robert H. Michel (R-Ill.) had offered his hometown paper a critical analysis of "antagonistic" GOP colleagues, rumors flew that he was about to retire—and the jockeying began to succeed him. The favorite is Minority Whip Newt Gingrich (R-Ga.), but his scorched-earth style worries some colleagues. Other contenders: Representative Henry J. Hyde (R-Ill.), a less confrontational conservative, and Representative Gerald B. Solomon (R-N.Y.), a moderate conservative. Michel says he'll reveal his plans by October.

JAPAN ECONOMY

HOW BADLY WILL YEN SHOCK HURT?

It may sap growth—and strain the new government

Just back from a 10-day vacation in New England, Koitsu Tsuchiya figures he couldn't have timed his trip much better. With the yen surging relentlessly against the dollar, the board member at Nikkei Business Publications Inc. in Tokyo spent a lot less in the U. S. than he would have earlier in the year. His family used their mighty yen to stock up on shoes, sweaters, accessories—even a fancy golf club. "Everything was so cheap," Tsuchiya exclaims. "It felt completely different than when I was in the States 12 years ago."

Globe-trotting and import-buying Japanese may love *endaka*, or the rising yen, which has finally hit 100 yen to the dollar, down from 125.8 yen in January. But the gravity-defying currency is giving Japanese executives and government officials vertigo. In the midst of its worst economic slump in two decades, the last thing the country needs is a dearer currency that dampens exports, which account for 14% of gross national product. Economists are already lowering their growth estimates, some to 1% for this year.

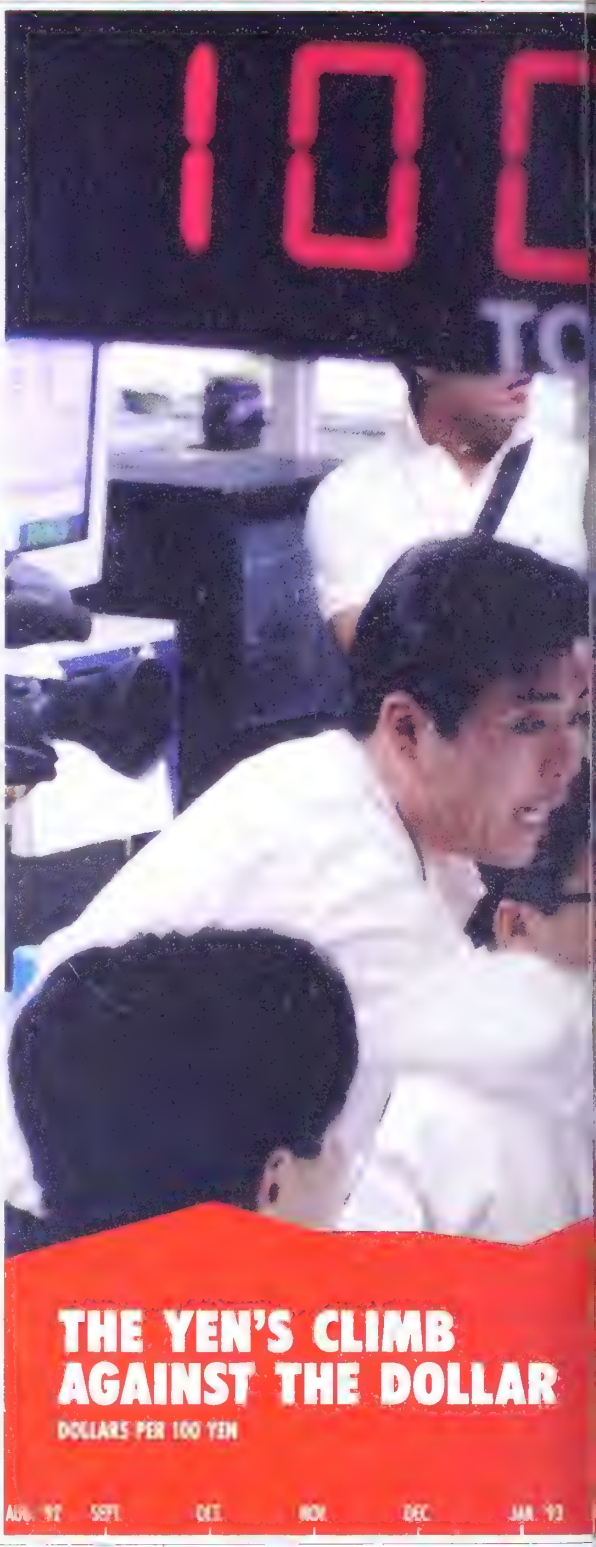
The unexpectedly rapid *endaka* is also hammering exporters' profits, which were set for a healthy gain this year. Pioneer Electronic Corp. figures every one-yen uptick slices annual operating profits by $9 million. Analysts say that for Toyota Motor Corp., Japan's largest exporter, the damage is six times worse. That's forcing a new round of price hikes and cost-cutting. After slashing costs by more than $500 million since last year, Toyota still had to raise U. S. prices by an average of 1.2% this year, and Chairman Shoichiro Toyoda has hinted of more to come.

Rising prices, of course, threaten Japan's share of markets where competition is strong, such as autos. Japanese carmakers have already lost U. S. market share, from 26% in 1991 to 22% as of July, thanks mainly to higher prices.

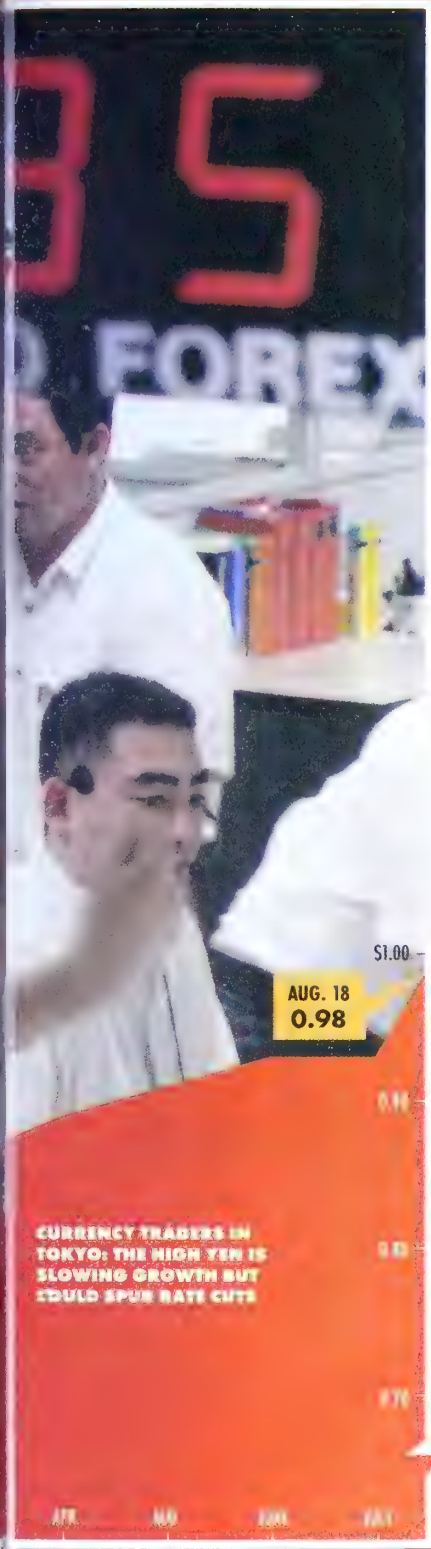
Such pressures are putting the new government of Prime Minister Morihiro Hosokawa to its first test. Business leaders and the mass media are calling for Hosokawa to stimulate and deregulate the domestic economy. That would ease pressure on Japanese exporters. Much of *endaka* is driven by Japan's surging current-account surplus, now running at an annualized $140 billion.

BANK BOOST. *Endaka* may look like all pain, but there are some benefits that could outweigh exporters' cries. The high yen could prompt the Bank of Japan to lower interest rates a bit, spurring consumer spending. It is already shrinking banks' problem loans overseas. *Endaka* is also forcing Japanese manufacturers to move low-tech production offshore. Finally, it could take some of the heat out of U. S.-Japanese relations, as Japanese market shares slip, particularly in autos.

While the three-week-old government weighs various remedies for the economy, powerful bureaucrats are resisting any radical moves. Although many economists believe $30 billion to $40 billion in tax cuts could have real impact, for example, a Finance Ministry official disagrees. "People calling for tax cuts or fiscal stimulus are disregarding where the money will come from to cover the revenue loss," he says.



Hosokawa and his Finance Minister Hirohisa Fujii, haven't said much to counter this kind of thinking. And the shaky coalition Cabinet could have serious trouble budging the bureaucrats who run Japan's economy, since Hosokawa's crowd is so new to governing. "Until now, they've had no responsibility," says veteran political commentator



higezo Hayasaka. "That will lead to roblems."

If the politicians can't agree, the independent Bank of Japan is likely to be more decisive: It's expected to cut the discount rate by 0.5%, to 2%, within weeks, despite denials by Bank of Japan Governor Yasushi Mieno. The bank recently signaled this by easing rates in the overnight money market. Besides cheaper funds for companies, depressed interest rates could also dislodge some of the billions stashed away in consumer savings accounts. Stingy consumer spending has been a key drag on economic growth for more than a year.

The mighty yen is making other waves, as well. It's spurring a second frenzy of overseas investment as Japanese companies desperately scramble for cheaper production and components bases. Pioneer, for one, is in the process of boosting overseas manufacturing of products sold abroad to 50% from 30%.

"HOLLOWING OUT." At textile and fibers giant Toray Industries Inc., the strategy is to try to produce 40% of foreign sales in overseas plants within 10 years, compared with 13% today. Its plants in Japan that produce commodities could then be converted to make higher-value-added products. "Eventually, we will become a true multinational like DuPont," says Norihiko Saitoh, a Toray manager. "*Endaka* is accelerating the process." It's the same for many others, from Matsushita Electric Industrial Co. to bulldozer maker Komatsu Ltd.

While the high yen is a relentless force for manufacturers, it's giving Japan's beleaguered banks a breather. The yen's rise against the dollar has diminished the value, in yen terms, of their overseas assets, many of them troubled. That lets them put aside less equity for each loan and allows them to use the equity to cover bad domestic loans or new foreign credits.

Endaka also helps Japan's large commodity importers such as breweries, bakeries, aluminum smelters, and utilities. For these and other reasons, such as declining interest rates, the Japanese stock market has been sanguinely drifting upward despite yen shock. On Aug. 18, the Nikkei stock average closed at 20,773, 8% higher than its recent low on June 21. Bank shares have led the way.

The long-term victims of *endaka* will be the small- and medium-size subcontractors and suppliers who lose business when their large customers shift work overseas. This has sparked renewed concern about the "hollowing out" of Japanese industry. The worry in labor-short Japan is less about jobs than the loss of knowhow. Says Toray's Saitoh: "We have to figure out how to become a multinational without destroying the small guys we've relied on for years."

How long will *endaka* persist? A consensus seems to be emerging that enough is enough. Economists are even beginning to worry about ruinous deflation if the yen goes as high as 90 to the dollar soon. That could lead to massive layoffs and further depression of asset prices.

Japan has deftly dealt with wrenching *endaka* in the past. But the margin for adjustment is evaporating fast. "We're in the bottom of the ninth," says Toray's Saitoh. Smart money says Japan will pull it out, but rookie Hosokawa can't afford any errors.

By Robert Neff in Tokyo, with Owen Ullmann in Washington and William Glasgall in New York

SUPPOSE Y1 = $1 . . . IT COULD HAPPEN

Could the yen actually be headed for parity with the U. S. dollar? Just maybe, but not because it will appreciate that much. Talk is circulating in Tokyo about "redenominating" the yen by moving the decimal point two places to the left. Presto! One yen to one dollar.

Some politicians are urging Prime Minister Morihiro Hosokawa to push for *denomi* as a way to stimulate certain industries and boost pride in the currency. The pride issue may seem superfluous, but among major currencies only the yen and Italy's lira are expressed in hundreds of units to the dollar. Since one yen buys almost nothing, the argument goes, the currency's basic unit looks measly.

The idea has cropped up occasionally over the past decade and has even moved some stocks. In July, the share prices of Toppan Printing and Dai Nippon Printing jumped on such rumors. The change presumably would be of benefit to printers, paper and software suppliers, and makers of money-handling gear such as vending and ticket machines.

But most experts say the costs outweigh the benefits. "Does the government really want to waste its resources reprinting money at this time?" asks Robert Alan Feldman, chief economist at Salomon Brothers Asia Ltd. in Tokyo. Others say that in a deflationary climate, *denomi* would create the illusion of depressed income, thus dampening consumer spending.

A Finance Ministry official says there's no serious discussion of redenomination within the bureaucracy. That means it probably won't happen. But it's still fun to dream about buying a Big Mac for 3 yen instead of 300.

SOUTH KOREA

KOREANS LOSE A PAL: ANONYMITY

A decree bans business aliases—and just about everybody panics

On Friday the 13th, panic hit South Korea. Bank computers failed as customers rushed to withdraw money. The stock market dropped 4.75%, its biggest loss ever. Bond trading halted. The chaos came the day after President Kim Young-Sam announced measures to eliminate Korea's vast underground financial market. Kim's decree requires that all financial transactions be conducted under real names, not the fictitious names commonly used. The move was intended, said Kim in a nationwide address, to "bring economic justice to Korea" by eliminating a key source of corruption.

Cracking down on the underground economy is a pillar of Kim's reform program. He wants to do away with the corrupt financial practices woven deeply into business and politics. By one estimate, the size of the underground money market is $38 billion—or about 10% of Korea's market liquidity. Many of the billions deposited in accounts with fictitious names are widely believed to result from payoffs or illegal speculation in stock and real estate markets. The government wants to channel these funds into the organized money market and tax those who made fortunes illegally.

RAMPANT GRAFT. The drastic measures may help Kim politically by striking at the links between the underground economy and the political system. Ruling-party politicians have long relied on false-name accounts to receive illegal contributions from Korean corporations. In the opposition parties, candidates often pay hefty "donations" under aliases in order to win party backing.

Kim's decree also seeks to end speculative investments by channeling underground funds into conventional financial markets. That should help Korea's economy over time, says Deputy Prime Minister Lee Kyung-Sik. But critics say the real-name policy will create short-term distress for the thousands of small parts makers who rely on the underground money market for daily operating cash. The government has promised to channel as much as $1 billion in loans to such companies. But without more help, Lee Byung-Kyun, vice-chairman of the Korea Federation of Small Business, predicts "massive corporate bankruptcies."

THE STOCK EXCHANGE IN SEOUL TOOK ITS BIGGEST HIT EVER

Meanwhile, the financial markets are likely to remain volatile for weeks. Although the stock market has recovered from the initial shock, it remains vulnerable to anonymous investors—who control as much as 30% of the total market value. Given Korea's high bank lending rates of 12%, corporations rely heavily on the stock and bond markets for raising investment funds. But with the uncertainty created by the real-name system, few corporations will be willing to come to the market, says Kim Jae Ryong, executive director of Korea First Securities Co. Moreover, big investors may withdraw from the market rather than comply with Kim's real-name decree. That would result "in the collapse of the stock and bond markets," says one analyst. For his bold move to succeed, Kim Young-Sam needs support from those investors. If he doesn't get it, more unlucky days may lie ahead.

By Laxmi Nakarmi in Seoul

EUROPE

DRUGMAKERS START REACHING FOR THE PAINKILLERS

Across Europe, government cost-cutting is causing a huge shakeout

Last fall, Rolf Kramer's plans for an initial public offering were looking good. As chief executive officer at Frankfurt-based drugmaker Asta Medica, Kramer had managed to quintuple profits over the past five years as sales doubled to $685 million. But this year, Germany made draconian cuts in health-care spending, and Kramer's world changed overnight. In the first half, Asta's sales went flat, and Kramer had to put his public offering on ice. Instead of doing road shows to woo investors, he's slashing 10% of his work force and slamming a lid on research and development.

Kramer has lots of company. From London to Rome, governments are on the rampage to cut health-care costs—and the first target is spending on drugs. The reforms range from limits on profits and advertising to cutbacks in reimbursements (table). That's causing one of the biggest shakeouts Europe's $65 billion pharmaceutical industry has ever seen. "It will be a year of severe dislocation," warns Alastair Kilgour, a pharmaceutical analyst for BNP Capital Markets in London. Sales and profits are plunging for most drugmakers, especially in the German and Italian markets.

DAYS OF OLD. The combination of government-mandated cuts in Europe and stepped-up discounting in the $71 billion U. S. market have hit industry earnings and stock prices with a double whammy. U. S. drug stocks are trading at prices down 40% from their peaks in early 1992, while prices of European companies have dropped up to 30%. Analysts estimate drug profits at such German giants as Hoechst, Bayer, and BASF could drop by 40% this year.

Sure, drug companies selling in Eupe never could match the lucrative ofits of the U.S. market. But for ars, the industry enjoyed double-digit owth, in part because each of the Conent's universal health-care systems d its loopholes. Italian doctors, for exple, winked while grandmothers ked up medication for the entire fam- at government expense.

Those days are over. While the giants n adapt to the new era, smaller and dium-size companies producing meo products with limited R&D budgets ll have difficulty surviving. Germany's ug industry association predicts that of its 460 members will disappear durg the next 18 months. "Margins are mmer and slimmer," says Heinrich nken, head of Ratiopharm, a generic ugmaker based in Ulm.

OWD AVOIDANCE. European execues say that drug-development cycles ill have to be cut and the focus put on eakthrough medications, such as hering's new drug Betaseron, a treatent for multiple sclerosis. Because Beseron is the first on the market, anasts say, Schering can charge $7,500 for year's supply. Industry executives say ey will channel R&D into drugs for disses affecting the oadest segment of the pulation—cancer and ntral nervous system sorders, such as Alzeimer's disease—and way from treatments r rarer diseases or ose where the market ready is crowded. Kraer, for example, has illed R&D programs at sta Medica to develop rugs for cardiovascular iseases. "It's the largst [drug] market, but ere is intense competion," says Kramer.

Germany and Italy—e fourth- and fifthrgest markets worldide—have been hit the ardest. In Germany, inustry executives fear e recent rash of reorms, including a 5% ut in drug prices, will lash their sales by $4 illion, or 20% this year. lready, the drop in revnues has knocked Gernany down a notch from Europe's largest drug narket to No. 2, followng France. Pharmaceuical sales at chemical gint Hoechst dropped early 16% in this year's irst half, and its drug company is eliminating 200 jobs.

Britain also has redoubled efforts to reduce health-care costs. In mid-August, the government announced it was cutting the price it pays for drugs by 2.5%, effective for the next three years. Moreover, under threat from the British Health Dept., French drug giant Rhône-Poulenc already has been forced to slash the price tag of its sleeping pill, Zimovane, 84%, from $1.47 per tablet to 24¢ per tablet. Rhône Poulenc now says it will think twice before introducing new drugs on the British market.

In France, government officials have a different problem. Drug prices are the lowest in Europe, but the French consume twice as much medicine as other Europeans. To bring down consumption, government officials are seeking to cut drug company advertising by 10% across the board.

To be sure, the surviving companies will emerge leaner and meaner. "It's a healthy situation," says analyst Kilgour. "The German system allowed reimbursement for a lot of marginal drugs." To offset cuts in national health-care programs, drug companies are expected to expand their lines of over-the-counter medications to generate additional sales directly to consumers. Research and marketing alliances are likely to flourish to help spread the risk of investing in breakthrough drugs.

Generics companies are benefiting from the changes. In Germany, the government indirectly forced a shift to cheaper generic preparations by threatening to cut physicians' fees if they exceed their $14 billion budget for drugs this year. Fearful their compensation would be reduced, doctors overshot the government's 11% goal and cut drug spending by 17% in this year's first half.

Drug companies argue they are being forced to shoulder an unfair share of the medical cutbacks, since drug spending makes up only 10% to 15% of overall health-care costs in Europe. The real cost explosion, they say, is in hospital stays and medical procedures. The movement to cut expenses has targeted drug companies first because "you can hit drugs and get results in a matter of months," reports Kilgour. That's a lesson that isn't likely to be lost on Bill and Hillary Clinton.

By Gail E. Schares in Bonn, with Charles Hoots in Paris, Joseph Weber in Philadelphia, and Julia Flynn in London

THE BIG SQUEEZE ON PHARMACEUTICALS

BRITAIN

- Lower ceilings on drug company profits

FRANCE

- Government wants a 10% across-the-board cut in drug advertising

GERMANY

- Tough penalties for doctors who exceed the government's fixed budget for drug spending
- Government payments to drug companies cut by 5% on roughly a third of all prescription drugs

ITALY

- Patients' contribution to the cost of drugs will rise and be determined by the level of family income
- Government reimbursement on drugs cut by up to 4.5%, depending on the cost of the drug

DATA: JAMES CAPEL INC., BW

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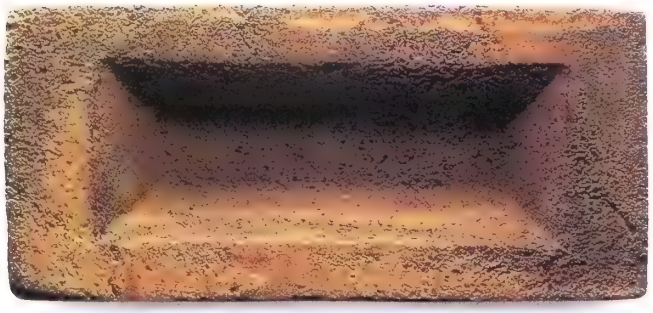

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S RUSSIA 'TRYING 'O RECAPTURE LOST LANDS'?

Ne night last July, Russian soldiers patrolling Tajikistan's border with Afghanistan ran into an ambush by Afghan *mujahedeen.* Some 25 Russians died in a hail of chine gun and rocket fire. The troops were on patrol at the quest of the Tajik government, which many believe Russia vertly helped to power last December. So serious was the rder incident that Russian President Boris Yeltsin immedily dispatched Defense Minister Pavel S. Grachev to the ne and fired Viktor P. Barannikov, his Security Minister. For many Russians, the news brought back chilling memos of the Afghan war. It also served as a startling sign of w deeply Russia is becoming inved in the nominally independent ithern states of the former Soviet pire—despite Yeltsin's vows to reect their independence. He is un: pressure from the increasingly luential hard-liners in Moscow to otect Russian expatriates and oth interests in these regions. He is o trying to block attempts by Tur, and other neighboring countries assert themselves in the Islamic oublics at Russia's expense. here's a feeling that Russia is try: to recapture lost lands," says an ian diplomat in Moscow.

RUSSIAN AIDING REFUGEES—INSIDE GEORGIA

EE HAND. Indeed, Russian troops—some of them mercenar—are active all along a 2,000-mile swath from Tajikistan to breakaway Georgian republic of Abkhazia. Several Russian ny divisions are garrisoned in Armenia, which for five ars has been battling neighboring Azerbaijan for control of province of Nagorno-Karabakh. This summer, Geidar Aliya former Soviet Politburo member and KGB honcho, seized wer in oil-rich, war-weakened Azerbaijan. Baku's new leadwants to turn away from Turkey in favor of Moscow.

One could argue that Yeltsin had no choice but to intervene ng the borders. Nagorno-Karabakh is only one of several bloody ethnic conflicts along Russia's southern flank. Abkhazia, once a popular Black Sea resort, has been trashed in a yearlong battle with Georgia. Clan wars have created chaos in Tajikistan. Moscow worries that the raging battles could jeopardize the 4 million to 5 million ethnic Russians living in Central Asia. It also fears that the conflicts could exacerbate nationalist struggles within Russia itself, notably in the Caucasus regions of Ingush and North Ossetia, where Yeltsin's handpicked military governor was recently assassinated.

Yeltsin may also be finding intervention in the former Soviet republics a useful distraction from domestic troubles. Russia's increasing aggressiveness in the border regions is popular with the hard-liners, who have been giving Yeltsin a rough time over economic reform.

Yeltsin's moves are making the Clinton Administration nervous. That's why it's offering to try to mediate these disputes. But Central Asia is pretty far away, and there seems to be an informal understanding that Yeltsin can have a relatively free hand there and in the Caucasus but should keep his mitts off Ukraine and the Baltic states. U. S. officials rule out withholding aid to prod Yeltsin to back off. They don't want to undermine his reform.

On balance, having Yeltsin impose order is probably better than having chaos in these regions. But allowing Russia to expand its influence again carries risks. It would give Russia considerable say over how the vast oil wealth in the former republics is to be developed—complicating the work of U. S. oil companies already involved there. And over time, reestablishing Moscow's hegemony in the area could fuel Russian nationalism—not exactly a benign force in the past.

By Peter Galuszka in Moscow, with Amy Borrus in Washington and Juliette Rossant in Baku

OBAL WRAPUP

ENEZUELA PUSHES REFORM

nterim President Ramón J. Velásquez has been given "special pows" to implement several key econom reforms. That is easing fears that rent political turmoil could lead to acksliding on economic liberalization. elásquez can now allow foreign banks ito the country, privatize an ailing ate airline, and lower the tax rate n joint ventures with foreign oil comanies. The Congress also signed off on iree hydrocarbon projects involving ich foreign companies as Exxon, onoco, Total, and Shell. These moves ıould lock in reform after the Decemer presidential election. Right now, Rafael Caldera, a populist critical of these steps, is the front-runner, but a reformer, Oswaldo Alvarez Paz, is second in the four-man race.

MONEY FOR PALESTINIANS

Despite glitches in the Arab-Israeli peace talks, the U. S. is trying to raise $50 million to $100 million from allies to help fund the development of a Palestinian civil administration in the West Bank and Gaza. The U. S. is trying to get the funds in place because it expects a breakthrough in the next six months that would lead to interim Palestinian responsibility for such functions as health services, education, and tax collection in the territories.

U.S.-CHINA MILITARY TIES

The Defense Dept. is pushing to resume regular military contacts with China. Such exchanges were suspended after Beijing crushed democracy demonstrations in Tiananmen Square in June, 1989. But senior Pentagon officials believe reestablishing military ties would enhance U. S. understanding of China's strategic aims and its weapons purchases. As a first, tentative step, the National Defense University, which is funded by the Defense Dept., would host a conference for Chinese military academics late this year. But the White House has yet to give a green light.

GUANZE SPA

STRATEGIES

WILL JOE CAMEL HAVE TO HOOF IT ALONE?

KKR may soon split off Nabisco from RJR

After years of financial gymnastics—a $24.9 billion leveraged buyout, a $6.5 billion refinancing, sales of huge divisions, a botched $1.7 billion special stock offering, and the sale just this month of $1.5 billion of preferred stock and $1 billion of bonds—RJR Nabisco Holdings Corp. could be nearing the end of its exhausting gyrations.

Next April marks the fifth anniversary of the LBO that left Kohlberg Kravis Roberts & Co. in control. Under Internal Revenue Service rules, RJR Nabisco then becomes eligible for a tax-free spin-off of its Nabisco food business. And next May, many of the restrictive bonds KKR used to finance the LBO can be redeemed. If Wall Street's appetite for branded-food company stocks improves by then, RJR Nabisco is widely expected to split up its businesses, which were joined when R. J. Reynolds Industries Inc. bought Nabisco Brands Inc. for $4.9 billion in 1985.

The rationale for the split is simple: Even at current depressed levels, food companies are valued by investors at an average of 18.4 times earnings, while tobacco companies are valued at only 8.8. At a recent 4¾, RJR Nabisco, which went public again in 1991, trades at a multiple of 8.6. Freed from the drag of the tobacco business, the value of Nabisco's impressive roster of food brands might soar. KKR, which still controls RJR Nabisco with its 49% stake, "has had an eye toward doing [the spin-off] for years," says an investment banker who has advised KKR in the past. "It's the largest investment in their portfolio, and they are doing everything they can to create value in a business where the fundamentals have not improved since the time they bought it."

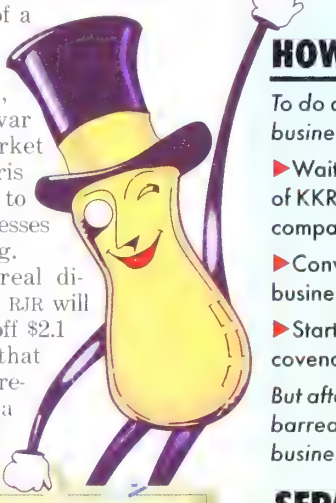
BOND BARRIERS. For evidence of an impending split, spin-off watchers point to KKR's hiring of former ConAgra Inc. Chairman Charles M. "Mike" Harper as chief executive in June, after Louis V. Gerstner Jr. left for IBM. Harper's task, they believe, is to bolster the value of the food business as KKR continues to hunt for an exit strategy. Harper was a renowned builder of brands in his two decades with ConAgra, but the 65-year-old executive came out of semiretirement to take the RJR Nabisco job, and he spends weekends back home in Omaha. Executives from KKR and RJR Nabisco declined to be interviewed for this story, but company spokesman Jason H. Wright insists that the days of frenetic "financial engineering" are behind the company.

That's not likely. KKR has been trying to split the company since last December, when it devised a special category of stock tied to the performance of the Nabisco food business (page 61). The planned offering valued Nabisco at $6.7 billion—$120 million more than the current market value of the entire company. But because the two businesses wouldn't have been legally separated, investors balked, and RJR withdrew the offering in June. Still, with tobacco under fire because of a shrinking domestic market, regulatory concerns, and a price war launched by market leader Philip Morris Cos., the pressure to separate the businesses is only intensifying.

To pull off a real divorce next spring, RJR will first have to pay off $2.1 billion of bonds that contain covenants restricting such a move. Another $1.5 billion in other, noncallable de would also need to be renegotiated tendered. "Most of those covenants c be renegotiated," says Larry Weissma portfolio manager for the College R tirement Equities Fund, which is t second-largest RJR Nabisco sharehold after KKR.

Besides buying off or negotiating w its bondholders, the company has to w the support of its numerous commerc bankers, who hold $3.7 billion of its de for any attempted spin-off or refinancin In a possible effort to soothe those ban ers, RJR Nabisco earlier this month so $1.5 billion in preferred stock with yield of 9.25%, though it also issued billion in bonds. The company said th it issued both to enable it to pay dov higher-cost debt and to fund gener corporate expenses. But none of th debt can be called until May, and Pr dential Securities Inc. tobacco analy Leigh Ferst figures RJR Nabisco issu the preferred stock now to beef up equity to a level bankers may find mo comfortable. RJR and KKR are "worki toward some sort of breakup, howev structured," she says. "That's the foc of their balance sheet right now, [en neering] higher equity."

What would R. J. Reynolds Tobac Co. and Nabisco Foods Group look li as independent companies? Since t two businesses have always been r separately and with few synergies b tween them, their op-



NABISCO FOODS GROUP

MAJOR BRANDS: Nabisco cookies and crackers, Planters nuts, Life Savers candies, Fleischmann's margarine, Milk-Bone dog biscuits, and Ortega Mexican food

HOW TO GET A DIVORCE

To do a tax-free spin-off of its Nabisco fo business, RJR Nabisco needs to:

- Wait until Apr. 28, 1994, the fifth anni of KKR's $24.9 billion leveraged buyout company. A spin-off could then be tax-fre
- Convince the IRS that there is a compe business argument for the split.
- Starting in May, pay off debt with one covenants that prohibit a split.

But after a tax-free spin-off, KKR would b barred under IRS rules from selling eithe business to another company.

SEPARATE BUT NOT EQU

NABISCO FOODS GROUP	1992 results* BILLIONS OF DOLLARS	R.J. REYN TOBACC
$6.7	NET SALES	$
$0.8	OPERATING INCOME	$
$5.5	MARKET VALUE**	$
$11.2	ASSETS	$2

*INCLUDING SALES FROM INTERNATIONAL DIVISIONS **ES

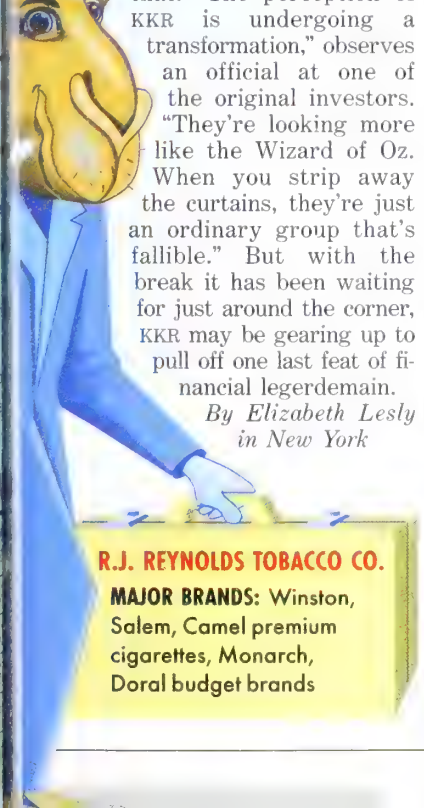
DATA BUSINESS WEEK COMPANY REPORTS, SANFORD C. BERNSTEIN E

ation and management would prob-
ly be remarkably unchanged. Analysts
d investors alike point to the well-re-
rded top managements of both busi-
sses, led by H. John Greeniaus as
esident of Nabisco and James W.
hnston as chief executive of R. J.
ynolds. The tricky part will be divvy-
g up the parent company's still siz-
le debt of $13.9 billion.

VIZARD OF OZ." Ideally, KKR and RJR
bisco management would pile most
the debt on the tobacco business,
ose rich cash flows, high profit mar-
s, and mature, low-investment busi-
ss could most easily cover the pay-
nts, says Sanford C. Bernstein & Co.
alyst Gary Black, who figures that a
un-off Nabisco would assume 25% of
e debt. Tobacco, with 1992 sales of $9
lion and operating income of $2.2 bil-
n, is much larger than the food busi-
ss, with its $6.7 billion in sales and
70 million in operating income. Nabis-
s lighter debt load would reflect its
ver margins and its need to spend to
pand its business. Bondholders might
lk at an arrangement that saddles the
bacco company with more than its
are of debt. Says Standard & Poor's
rp. analyst Kenneth Shea: "Why
ould the whole company [suffer] when
bisco Foods is a good company?"

RJR Nabisco's glum shareholders are
ely asking the same question. The
are price has slipped 63% from its
91 peak of 13. KKR's 1987 buyout fund
vested $3.2 billion in RJR Nabisco, and
e backers of the 1987 fund aren't hap-
since the shares that cost them 5.61
are now worth 15% less than
that. "The perception of
KKR is undergoing a
transformation," observes
an official at one of
the original investors.
"They're looking more
like the Wizard of Oz.
When you strip away
the curtains, they're just
an ordinary group that's
fallible." But with the
break it has been waiting
for just around the corner,
KKR may be gearing up to
pull off one last feat of fi-
nancial legerdemain.

By Elizabeth Lesly in New York



R.J. REYNOLDS TOBACCO CO.
MAJOR BRANDS: Winston, Salem, Camel premium cigarettes, Monarch, Doral budget brands

'TOBACCO COMPANIES HAVE CREATED THEIR OWN MONSTER'

Karl Von der Heyden, late of RJR, sounds off on the industry

Karl M. von der Heyden was lured to RJR Nabisco Holdings Corp. by then-Chief Executive Louis V. Gerstner Jr. right after the 1989 Kohlberg Kravis Roberts & Co. leveraged buyout. The former Pepsi-Cola USA and H. J. Heinz Co. CFO was a well-regarded financial mechanic with a comprehensive understanding of the branded-foods industry. As chief financial officer, von der Heyden, 57, pared RJR Nabisco's debt and brought it up to investment grade by 1991. After Gerstner abruptly resigned in April to head IBM, von der Heyden became interim co-chairman and chief executive officer with General Counsel Lawrence R. Ricciardi.

Weeks later, industry leader Philip Morris Cos. slashed cigarette prices by 40% on what is now known as Marlboro Friday. In June, former ConAgra Inc. Chairman Charles M. Harper became CEO, and von der Heyden left.

Now considering his next move, von der Heyden took some time out to chat with BUSINESS WEEK Staff Editor Elizabeth Lesly about the tobacco and food industries.

STILL BAFFLED BY MARLBORO FRIDAY

Q *To what extent are the dire straits of the tobacco industry really of its own making?*

A The tobacco companies have created their own monster. They took prices up way too fast—way faster than any other consumer-goods [product] that I'm aware of. And Philip Morris made a second big mistake: They abruptly, abruptly changed direction and took the price down 40%.

Marlboro Friday was a cataclysmic event for the tobacco companies because all of a sudden, so much profit was taken out of the industry on a permanent basis.

Keep in mind that from the shareholder point of view, the advantage of these stocks—Philip Morris and other consumer stocks—was that they were considered relatively steady.

And Philip Morris taking this abrupt action shattered that whole image, not just for itself but for the other food and tobacco companies as well.

Q *What was your first thought when you heard what Philip Morris had done on Marlboro Friday?*

A Complete shock. And basically, a feeling . . . why? Why are they doing this? I still don't understand it, to this day.

Q *After working so many years to stabilize RJR Nabisco's finances, what was it like to have so many gains washed away in the past few months?*

A The LBO experience, the RJR Nabisco experience, was exhilarating, particularly in the early stages. This has recently been overshadowed. Tobacco is a beleaguered industry. The pressure's just on.

The diversification efforts of tobacco companies in the 1980s into food, which both R. J. Reynolds and Philip Morris pursued, was a flawed strategy. There are very few synergies between tobacco and food, even in the distribution and retail area. So the only reason that these companies did this is [because they feared] the tobacco business one of these days going away.

Q *What strategies will branded-goods companies have to use to combat the increased threat by private labels and other lower-cost producers?*

A They will have to get the price-value relationship in line. Nobody will be able to sell their stuff if the gap is too large. And there will be an increasing fragmentation of products offered.

The national branded companies will have to be more attuned to the ethnic preferences of consumers in different parts of the country. The branded companies aren't going to allow private labels to take over; they're going to do everything to keep [their dominance] in place.

ANDY FREEBERG

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HEWLETT PACKARD

ATEGIES

'HEY'RE NOT CRYING IN THEIR :RACKERS AT NABISCO

ew products promise to make last year just a dim memory

Most people probably figure the guy running Nabisco Foods Group has had a rough year. ter a thwarted stock offering, specula- n that Nabisco Foods will be broken and sold off, and a succession of new sses at parent company RJR Nabisco ldings Corp., a less resilient executive ight have gone hunting for another . Not H. John Greeniaus, the 48-year- l president of Nabisco Foods.

Why? Well, after several tough quar- rs, things at Nabisco Foods are looking . Many of its core brands are in slow- owth markets that have come under rce assault from private-label als. But Nabisco has been rking to bolster its venerable okie and snack offerings with e extensions, new packaging, d stepped-up advertising. At e same time, it's cooking up owth with a series of successful w products launched in the last o years: SnackWell's low-fat okies and crackers, Mr. Phipps ips, and Fat Free Fig Newtons ould produce $250 million in les this year. All in all, analyst ry Black of Sanford C. Bern- ein & Co. figures Nabisco's op- ating profits before amortiza- n could rise 7.2% this year, to billion, on sales growth of 5%, $7 billion.

OKIE COMBAT. Some key Nabis- brands have certainly been in ed of a boost. During the first arter of 1993, supermarket les of the company's two flag- ip cookies, Chips Ahoy! and eos, dropped 2.4% and 8.3%, spectively, according to Infor- ation Resources Inc. (table). Na- sco blames the slip on its deci- on to reduce advertising ending last year while the com- ny fought a price war with eebler. The popularity of pri- te-label brands has also taken s toll. President's Choice has nerged as Nabisco's feistiest mpetitor. Toronto-based retailer oblaw International Merchants, hich makes the brand, boasts at it's able to spend more on ingredients because it doesn't advertise.

Nabisco's latest response, however, is to advertise even more. This year, the company increased its ad budget by 22% in an attempt to reclaim lost customers and win new ones. For example, the company spent $4.2 million advertising Oreos during the first quarter of 1993, compared with $2.3 million last year, according to LNA/Arbitron. Nabisco's line of low-fat cookies and crackers is also winning new consumers. In fact, sales of SnackWell's Devils Food Cookie Cakes have been so brisk that supermarket managers can't keep them in stock.

INSIDE NABISCO'S PANTRY

	First-quarter sales* (Millions) 1993	1992
OLD PRODUCTS		
CHIPS AHOY!	$41	$42
OREOS	55	60
RITZ CRACKERS	55	55
PLANTERS PEANUTS	56	55
FIG NEWTONS	36	30
NEW PRODUCTS		
SNACKWELL'S COOKIES & CRACKERS	$21	NA
CHUNKY CHIPS AHOY!	NA	NA
MR. PHIPPS PRETZEL CHIPS	9	8
FAT FREE FIG NEWTONS	25	NA
PLANTERS HEAT SPICY PEANUTS	1	NA

*Supermarket sales only NA=Not available

DATA: INFORMATION RESOURCES INC., COMPANY REPORTS

Nabisco has finally retaliated against President's Choice with a premium chocolate chip cookie of its own—Chunky Chips Ahoy! À la Loblaw's, there will be no advertising heralding the launch of the chunky variety, which is hitting supermarket shelves in August. And if Nabisco can't beat its private-label rivals, Greeniaus doesn't rule out joining them. "Private label is something that we'll think about," he says. Nabisco already makes private-label cookies and crackers in Canada, under the name Our Compliments.

POOPED PEANUTS. Despite the importance of cookies and crackers, which account for 50% of Nabisco's operating profits, Greeniaus is also trying to enliven many of the company's other brands, such as Planters peanuts. Greeniaus concedes that Planters was "getting tired and old-fashioned." So he gave the Planters people a mandate to revitalize the brand to attract younger customers. They responded with a flurry of new products including spicy Heat peanuts and P. B. Crisps, a peanut-butter candy in a peanut-shaped cookie shell.

These and several other new peanut products are being sold in soft, brightly colored plastic bags instead of the traditional cans and jars. That's clever: Cans and jars can be resealed, put away, and forgotten. But open a plastic bag of peanuts, Greeniaus figures, and you've got to eat them all—or watch them go stale.

Of course, it's not complete snack heaven at Nabisco headquarters in Parsippany, N. J. Earnings at the $465 million Fleischmann's margarine unit are a paltry $22 million, just 2% of Nabisco's total. Then there's the challenge of adding a little life to the Life Savers brand. Although the $500 million division is profitable, Life Savers "hasn't been performing as well as I would like," says Greeniaus.

And what about those nagging rumors that either one or all of Nabisco's divisions are up for sale? "When you're owned by a company like [Kohlberg Kravis Roberts & Co.] there's no such thing as 'It's not for sale,'" says Greeniaus. "But we have no plans to divest anything we own, and we are aggressively looking for new acquisitions." For the moment, at least, Greeniaus has no plans to start scanning the want ads.

By Laura Zinn in Parsippany, N. J.

PHYSICS

WINDOWS ON THE WORLD OF ATOMS

An awesome new breed of microscopes will have far-ranging uses

A computer screen fills slowly from the top down with an image of spherical projections jutting out from a surface. They look like Easter eggs sitting in a cardboard tray. In reality, though, they represent the structure of molybdenum atoms in a crystal lattice. The picture shows the atoms, just 4 billionths of an inch in diameter, lined up with the precision of a military formation, a characteristic of metals.

A decade ago, this atom's-eye view didn't exist. Back then, scientists had to deduce much of what they knew of the structure of atoms and the laws that govern their behavior from mathematical calculations and chemical reactions. But today, using a dazzling new breed of "scanning probe microscopes" (SPMs) that physically sense a surface rather than magnify it, researchers can create three-dimensional images of a material's atomic structure. They can even pick up atoms, one by one, and move them.

SOARING DEMAND. The implications are awesome. If scientists can plumb the characteristics and behavior of individual atoms on surfaces, they can better understand the properties and behavior of all matter. They may thus learn why metals corrode, why two surfaces adhere, or how biological reactions occur. The microscopes have also emerged as the primary tools of "nanoscience," the next frontier in miniaturization that will affect all sorts of products. The SPMs' manipulation of atoms could help engineers shrink chip circuits, now roughly one-four-hundredth the thickness of a human hair, to one-thousandth that size—making chips many times faster. SPMs "are fantastically powerful," says Reizo Kaneko, a Nippon Telegraph & Telephone Corp. scientist. "For the first time, we can watch atomic events in the real world and build devices based on that."

Ever since the first instrument, the scanning tunneling microscope or STM, won the 1986 Nobel prize for its inventors at IBM's Zurich lab, scientists and engineers have been exploring the atomic terrain. Biologists are training SPMs on living cells to watch them in action at a molecular level. And now, by gazing at a computer screen, engineers at Ford Motor Co. can visually grasp the forces that cause materials in clutches, brakes, and paint to wear. "If we can better diagnose what happens to materials at the atomic level, we can improve them more efficiently," says Alan D. Brailsford, head of the physics department at Ford Research Laboratories.

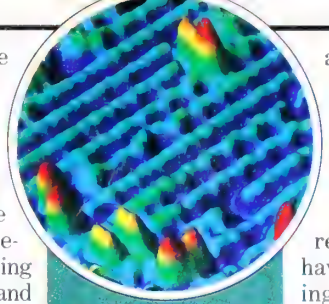
The devices also are moving onto factory lines. Electronics giants IBM, NEC, and Matsushita Electric use custom-made SPMs for inspection tasks during the production of silicon wafers, recording heads, and disk-drive platters. Even more important, researchers have created the first crude SPM chips. One day chips fitted with hundreds of SPMs could be employed as sensors powerful enough to emulate human vision, be used as probes that manipulate human genes, or in ultrahigh-capacity information-storage systems. "We can't begin to glimpse all the applications," says IBM physicist Heinrich Rohrer, co-inventor of the STM.

It's no surprise, then, that demand for the devices is soaring. Roughly five SPM makers have sprung up since 1986. Last year, the largest, Digital Instruments in Santa Barbara, Calif., sold $2 million worth. Next year, global demand for SPMs, which cost between $60,000 and $500,000, could hit about $100 million, up from $50 million this year, says Marketing Director Tim Van Slambrouck of TopoMetrix in Santa Clara, Calif.

The race to harness SPMs is sparking intense international rivalry. Japanese electronics makers were among the first to grasp the instruments' potential. And when it comes to exploring nanoscience and the technologies that make it possible, Japan is already "far ahead of anybody else," says Rohrer, who watches Japanese research efforts. In fact, Japan considers SPMs so important that in January the government kicked off the $250 million Atom Manipulation project. It is pooling the talents of 30 electronics and materials companies, including Motorola Inc. and Texas Instruments Inc., to develop new SPMs and other equipment.

The STM that Rohrer and Gerd Binnig invented in 1981 is based on an electronic effect known as "tunneling," in which a minuscule current of electrons jumps between two materials placed in

oximity. As the distance rinks or lengthens, the rrent becomes strong- or weaker. That varia- on is the basis of the achine's powerful probe echanism. In an STM, the nneling current seeps be- een a metal tip resembling tiny phonograph needle and e target sample. The tip, st a few atoms in diame- r, drags back and forth ghtly above the sample. As e current fluctuates, a com- ter measures the changes d translates them into an age on the screen.



AT IBM: AN STM HAS MOVED THESE ANTIMONY MOLECULES—A STEP TOWARD ATOMIC-SCALE DATA STORAGE

Trouble is, the STM works only on nducting surfaces, such as metals. So 1985, IBM's Binnig and two associates vented the atomic force microscope, AFM, which can probe biological sam- es. Instead of creating images by easuring changes in current, the AFM easures variations in the repulsive rces between the atoms on the micro- ope's tip and atoms on the surface of e sample (illustration). Unlike such in- ruments as electron microscopes, hich require elaborate sample prepara- on and work only in a vacuum, an AFM nctions in air or under water and can obe a sample in its natural state. In the past two years, moreover, sci- tists have designed variations of the M that are exquisitely sensitive to anges in magnetism, temperature, and ectrochemical properties. At American elephone & Telegraph Co.'s Bell aboratories, physicist Eric Betzig is rfecting the near-field scanning optical croscope. By using a probe of fiber-op- wire that emits light, it gets nearly as good resolution as the AFM without touching the sample. That eliminates wear on the sample and avoids distortions caused by contact with the tip.

Ironically, the computer renderings created by SPMs have outpaced understanding of how atoms behave. Are the occasional spaces between molecules in a sample a defect in the material or some other artifact? "You have to know a lot about the surface you are looking at," says John M. Rooney, research and development vice-president at Sun Chemical Corp., to correctly interpret the images. Even so, some companies are now confident enough to put the machines on production lines: Sun Chemical in Fort Lee, N. J., has installed an AFM to monitor how well inks and coatings adhere to paper.

SPMs are also proving their worth at IBM. Nearly two years ago, Big Blue started using a specially designed AFM to inspect the width and depth of circuit lines etched on semiconductor wafers at its Burlington facility in Essex Junction, Vt. The SXM Workstation, as it's called, has 50 times greater resolution than the electron microscope IBM previously used for the task. What's more, the 8-inch wafers, which contain 118 chips each, don't have to be broken apart to do the inspections. That saves about $1 million a year on one 16-megabit DRAM line, says Michael L. Young, senior associate engineer at the Burlington plant. IBM also hopes to profit by marketing the SXM through Veeco Instruments Inc. So far, IBM has booked six orders.

Meanwhile, the AFM's ability to create images of molecules in living tissue is producing intriguing finds. At the University of Chicago, Dr. Morton Arnsdorf uses an AFM to peel membrane layers from living cells. This year, such a "nanodissection" produced the first pictures of the inner surface of gap-junctions, the pore-like communication channels that connect adjacent cells. Their malfunction can lead to heart-rhythm disturbances and other disorders. Doctors hope images of the structure will give them clues to develop better drugs to treat the malfunction.

SPMs' ability to move atoms may also help revolutionize information storage. IBM scientists indicated as much in 1990, when they used an STM to arrange individual xenon atoms to spell out the company's logo. The exercise took all day, but it drove home a point: If you can manipulate atoms and read their presence or absence as digital language, the potential exists for atomic-scale data storage. In theory, the Library of Congress could be stored on an 8-inch silicon wafer, says Don W. Shaw, director of Texas Instruments' Tsukuba Research & Development Center in Japan.

BILLIONS OF BITS. IBM continues to push the frontiers of using microscopes in computing. Scientists at its Almaden Research Center in San Jose, Calif., use a laser to heat an AFM tip as it's pressed against a plastic disk to form a shallow pit. By reading these pits, which are one-tenth the size of those on CD-ROMs, as ones and zeros, researchers think they can store 30 billion bits of data in a square inch of disk space, about 50 times the storage of CD-ROMs.

Still, today's AFMs can read only 1 million bits per second, one-third as many as conventional devices. To be used in information storage, or for nanotechnology, they need to be much faster. The key is creating chips that have many tips working in parallel, says Noel C. MacDonald, director of Cornell University's National Nanofabrication Facility. MacDonald wants to put 1,000 SPM tips on a fingernail-size silicon chip. Do that, and arrays of chips could move thousands of atoms in a microsecond or create sensors that could emulate human sight or hearing. Such technology is the "precursor of what electronics will look like in 10 years," he says.

So far, MacDonald has managed to get 25 tips vibrating in parallel on a chip. Each tip, complete with three micromotors and a stylus, takes up just

1 A tiny tip comes in contact with the surface of the sample, which moves back and forth on a mount. As it scans, the tip bumps up and down, repelled by forces between the atoms on the tip and on the sample surface.

2 Meanwhile, a laser beam is bounced off the arm that holds the tip. Photodiodes measure the light deflected off the moving arm.

3 The measurements produce an atomic-scale topographic map of the sample, which is displayed.

CHART BY FRANK CORNELL

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3/1,000ths of a square inch. MacDona thinks this could become a prototyp for a sensor that would be a faste more dependable accelerometer than now used to deploy automobile airbag

Takao Okada, manager of Olympu Optical Co.'s nanometrics lab, is also u ing parallel arrays to create more sens tive SPMs. Working with AFM co-invent Calvin F. Quate, a physics profess emeritus at Stanford University, Okad has shrunk an AFM to a size where 50 will fit on an 8-inch wafer. The tric was to create a film that measures th force of atoms pressing against a m croscope's stylus. This film allows a m croscope to be fabricated as part of a si icon circuit, using conventional chip making processes. Such sensitive devi es could be used to identify and manip late the amino-acid sequences that mak up genes, thus generating clues abou the causes and cures of disease.

NATURE'S ANSWER. In Kaneko's lab, sc entists are using SPMs to learn lesson from nature that may help them creat nanodevices. In one case, a researche probes the flagellum, or propeller, of bacterium. The molecules that conne the tail to the cell are nature's answe to a bearing. This structure, far smalle than the tiniest element that can b etched on a silicon chip, can spin a 10,000 rotations per minute. Unde standing how the flagellum works wit out breaking down could help Kanek craft tiny disk drives and motors.

There's a debate over whether th U. S. or Japan has the lead in SPMs Some experts, including Slambrouck think the rapid evolution of microscop technology plays to the advantage o nimble U. S. startups. When it comes t building machines that are useful today "there's a lot more effort and a lot mor work in the U. S. than in Japan," concur AT&T's Betzig. Still, Betzig concedes tha Tokyo's effort is well-funded and tha the Japanese produce some of the fines microscope components, including tips So if a single market, such as compute memory, ever creates massive deman for SPMs, "there's a risk that large [Jap anese] manufacturers would throw dow a lot of resources" and fly by U. S. pro ducers, says Slambrouck.

No matter who leads in the race t master SPM technology, the devices ar altering the scientific and industrial land scape. By bringing the atomic world t the computer screen, the microscope have opened a door to the domain o unseen forces and to nanotechnology Even if this doesn't lead immediately t libraries-on-a-chip, the visual signpost that SPMs provide will help extend th frontiers of scientific discovery.

By Neil Gross in Tokyo, with Emil Smith in New York and John Carey i Washington

TED BY OTIS PORT

STENING TO WHALES ITH SENSORS BUILT TO TRACK SUBS

The U. S. Navy has found a spin-off use for its hush-hush undersea surveillance system, a huge network of passive listening devices once reserved for detecting enemy submarines. Now, the system is eavesdropping on whales for marine researchers at Cornell University.

Since the project started last November, it has recorded tens of ›usands of whale contacts. It relies on a sound-based techue that Christopher W. Clark, director of Cornell's Bioacous- s Research Program, earlier pioneered for counting bowhead ales as they migrate under the Arctic icecap. Once Navy erators were trained to spot whale sounds, they could disguish between blue and minke whales—even hear regional l seasonal differences in their calls—and follow individual ales for days. The Cornell researchers hope the project will ›duce a more accurate census of endangered whale species.

N ANTIBODY THAT CLOGS UP KEY DEFENSE OF CANCER CELLS

's always risky to pin high hopes on cancer drugs that aven't been tested in people yet. But scientists at New rk's Memorial Sloan-Kettering Cancer Center are seeing rtling results with a new approach. Many internal tumors nage to shrug off chemotherapy by adding more of the sold receptors that snare an important protein called epider- l growth factor (EGF). The malignant cells that chemother- y just damages, but doesn't kill, are thus able to grab litional EGF and quickly repair themselves.

Experiments by John Mendelsohn, a Sloan-Kettering re- rcher, show that this cycle can be short-circuited with an ibody developed by ImClone Systems Inc. in New York. e antibody appears to clog up the receptors, thereby preting the cancer cells from getting the EGF they need. In ts on hundreds of mice, chemotherapy alone only slowed growth of lethal tumors. But when chemotherapy was coud with the ImClone antibody, every mouse recovered fully— l its tumors didn't recur. The detailed findings appeared in Aug. 18 *Journal of the National Cancer Institute*. Sloan-Keting hopes to begin human tests next year.

HERE EDISON AND BELL IGHT HAVE ENROLLED

an inventiveness be taught? Definitely, says Gregory S. Prince Jr., president of Hampshire College in Amherst, ss. His 1,200-student liberal arts school plans to prove it by tivating innovation among its students, then teaching the hniques to professors at other universities—forging a nationnetwork to promote invention. The program will be funded a five-year, $3.5 million grant from inventor Jerome H. melson (BW—Jan. 18), whose son is a Hampshire graduate student. "We have to inspire more young people to enter high technology and manufacturing," says Lemelson, "or our standard of living will continue to slip. We've already gone from No. 1 in the world to No. 12."

Hampshire will develop courses to stimulate creative thinking in areas such as "green" manufacturing—and encourage students to gain firsthand experience by forming so-called virtual corporations and bringing products to market. "New ideas and products generate the new businesses that generate new jobs," says Prince. By 1996, he expects to stage a national symposium to spotlight the best student ideas countrywide. Meanwhile, Lemelson is talking to another school about sponsoring a best-student-invention contest with a top prize of $250,000.

A SPOONFUL OF SUGAR HELPS THE CHEMICALS GO DOWN

John W. Frost figures that acquiring a sweet tooth could help the chemical industry's environmental image. A research chemist at Purdue University, Frost heads a team that's working on ways to use sugar as a feedstock instead of petrochemicals in some processes. At an Aug. 25 meeting of the American Chemical Society, he will report that sugar can supplant benzene, a carcinogen, as the starting material for adipic acid, a common industrial chemical that's used to make such things as nylon and fertilizer.

What turns the trick is a "biocatalyst," a microbe that has been genetically engineered to produce an enzyme normally found in bacteria called *Klebsiella pneumoniae*. This enzyme triggers the conversion of glucose into adipic acid. The Purdue approach, on which patents are pending, isn't economically competitive yet. But that could change if environmentalists succeed in forcing industry to factor in the full life-cycle costs, including disposal, of conventional methods.

YOU MAY HAVE TO RESET THIS WATCH —IN A MILLION YEARS

For a century, the workers at Germany's Junghans lovingly turned out hand-crafted cuckoo clocks and communion watches. But the Black Forest's lush greenery afforded no shelter against the heat of low-cost competition from Asia, and Junghans sank deeply into the red in the 1980s. Now, the Schramberg company is battling back—with what must be the world's most accurate wristwatch.

Junghans' Mega watches are guaranteed to lose no more than one second in 1 million years. That's because they have a radio receiver tuned to the time-signal broadcasts that set the standard in most industrialized countries. If the watch loses or gains a fraction of a second, a chip automatically resets the time. Mega watches, whose prices range from $200 to $6,000, are already such hot sellers in Europe and Japan that Junghans can't keep up with demand. Perhaps it's just as well that the U. S. introduction was delayed while Junghans develops a more sensitive antenna—a necessity because the American time signal, broadcast from Colorado, is fairly weak on both coasts. Look for the watches to show up by Christmas.

CHEW WASS

FOR MEMBERS ONLY: JAPAN'S UNDERWRITING CLIQUE

Yankee brokers are scarce in this market, and that has U.S. trade officials spoiling for a fight

When it comes to trading, Morgan Stanley has taken Tokyo by storm. The trading floor at Morgan's downtown Tokyo office is adorned with an eye-catching symbol of the firm's success: the stuffed head of a bull. It's a gift from Kevin E. Parker, the managing director who made Morgan Stanley Japan Ltd. a fortune in equity-derivatives trading by the time he left in June. But one floor below, in the underwriting department, you'll find no such elation. Other than its ground-breaking deal to underwrite three bond issues by Nippon Telegraph & Telephone Corp., since 1991 Morgan's underwriting department so far has little to show for its efforts.

Underwriting tends to be a clubby business everywhere, but nowhere is it quite so insular as in Japan. Morgan and other U. S. brokers, from Goldman Sachs (Japan) Corp. to CS First Boston (Japan) Ltd., have proven they can trade stocks and bonds in Tokyo. But when it comes to the growing market for new issues, the American houses are barely noticeable.

Most of Japan's brokerages, still reeling from the aftershocks of the market crash and strapped for revenues, would like to keep it that way. So far they have succeeded, but Washington is likely to turn up the heat when a new round of U. S.-Japan trade talks begins in September. None too soon, say the Americans. "We've been trying to penetrate the market for years without success," says Robert Hormats, vice-chairman of Goldman Sachs International Ltd.

U. S. Treasury officials are spoiling for a fight. They say Japanese regulators prevent U. S. houses from shining where they are strongest by keeping a clamp on innovative use of derivatives in tailoring products to issuers' needs. Lawrence H. Summers, Treasury Under Secretary for international affairs, told Congress on July 21 that American brokers in Japan "are prohibited from iss ing new types of commercial bonds other instruments that might compe with the ability of banks to serve as t principal lenders to industry."

UNFAIR ADVANTAGE? Japanese broke ages counter that they are kept fro building market share in the U. S. b cause of cozy issuer-underwriter rel tionships. But Japanese brokers the U. S. are way ahead of t Americans in Japan. Accordi to Securities Data Co., t Japanese were managers 63 new equity and bond sues in the U. S. in 199 By contrast, U. S. br kers in Japan manag a grand total of o deal in 1992. And neutral turf, the U. brokerages are hol ing their own. Accor ing to IFR Securiti Data, non-Japanese largely U. S.—broke ages have a 46% sha as managers of Eur yen issues, compare with 54% by Japanes outfits.

Tokyo underwriters sa that inside Japa even if you inclu deals where the played bit parts, no Japanese firms u derwrote only 2.6 of all bonds in 199 and even less of e uities. Says Masa Kaito, a vice-president for capital ma kets at Morgan Stanley: "The market designed to protect club members." H points out that Morgan Stanley trai only the Big Four—Nomura, Nikk Daiwa, and Yamaichi—in over-th counter trading of bonds but is 11th bond underwriting.

A crucial test is developing in the co porate-bond market. Outside of utili bonds, this market barely existed a fe years ago, but now it's growing fast, a

HOW U.S. UNDERWRITERS ARE SHUT OUT IN JAPAN

CORPORATE CULTURE Japanese issuers and underwriters have long-standing relationships. They are bound by interlocking favors in many areas, not just underwriting.

PRICING Because secondary bond trading is so thin, it's hard to price new bonds objectively, and companies have been able to pressure Japanese underwriters to keep rates low. So they stick with the Japanese firms.

TIGHT REGULATION The Finance Ministry is slow to permit innovation such as bonds with combinations of equity-linked derivatives tailored to issuer needs, a field where U.S. firms would shine.

DATA: BUSINESS WEEK

panese corporations are being freed om restrictions on who may issue nds and how much. In December, 89, only $21 billion in bonds were outanding in Japan, excluding electric utiles, but by last May, over $202 billion in nds were outstanding. Because this is new market, American brokerages ve high hopes. True, non-Japanese okers can't match the domestic brorages in selling to small investors, but ey have a beachhead among institunal clients.

TATION PLAN. But the indications so r don't bode well for the U. S. firms. nderwriters in Tokyo say the biggest arket share among the non-Japanese ms is held by Morgan Stanley, which hieved that feat by underwriting a miscule $500 million in Japanese bonds the fiscal year ended Mar. 31. That's ly 1.3% of the total, with most of that om one of the three bonds by NTT.

Electric utilities are stillthe biggest uers by far, accounting for 70% of all nds, but here, too, theyare giving a tance to the American firms. Tokyo ectric Power Co., for example, allows e foreign brokerages to take turns, e or two at a time, in underwriting a lf a percent or less of their bonds— t enough to make a profit, underwrit- say.

Tokyo Electric is considering freeing the underwriting rotation, an official ere says. But the first order of busiss seems to be a move to open the derwriting syndicate to new brokere subsidiaries of Long-Term Credit nk of Japan Ltd. and the Industrial nk of Japan Ltd. Allowing more forn participation will require "a political cision that will happen at the very ," says one U. S. underwriter, referg to the Ministry of International ade & Industry and the Ministry of nance.

True, U. S. firms have the solace of eir continued strong position in the royen market. Or do they? The Minis- of Finance wants to encourage Japase issuers to come "home" from the royen market. That makes a tough S. stance in the upcoming trade talks the more crucial.

Clinton Administration officials are timistic that Japan will relent, as the ce it must pay to conclude the Gener- Agreement on Tariffs & Trade. Obves Under Secretary Summers: "With Uruguay Round of GATT headed tord the endgame, this is going to be a cial time for financial services talks th Japan. There is a strong incentive get it resolved." But for the inbreed- coterie of Japanese underwriters, incentive for the status quo is even onger.

By Larry Holyoke in Tokyo, with Owen lmann in Washington

BUFFETT LOVES SALOMON, BUT SHOULD EVERYBODY?

Only continued strong earnings will justify the runup in its stock

Salomon Inc. stock is on a roll. The big brokerage house's surprising second-quarter earnings reached a record $433 million. That, combined with the psychological impact of Salomon Brothers Chief Executive Deryck C. Maughan's purchase of 25,000 shares, has helped push up Salomon's stock some 24%, to 49⅜, since July 30.

The most dramatic boost came on Aug. 16. That's when a Securities & Exchange Commission filing by Berkshire Hathaway Inc., which is controlled by investment guru Warren E. Buffett, disclosed that Buffett is seeking permission to raise his stake in Salomon to at least 15% and perhaps to as much as 24.9%. Buffett is Salomon's largest shareholder. He owns Salomon convertible preferred shares representing 14.3% of the common and needs antitrust approval from the Federal Trade Commission or the Justice Dept. to raise his holdings.

THE SAGE. In a frenzy of Buffett-inspired euphoria, the market pounced on the news and drove the stock up 2¼ in one day. "Mr. Buffett made a profound vote of confidence in Salomon's future. He sees long-term value," says Michael Flanagan, an analyst at Lipper Analytical Securities Corp.

Should other investors follow the Sage of Omaha? There are a few uncertainties to consider. It's unclear whether Buffett will actually buy a lot or a little Salomon stock, since neither Buffett nor Salomon officials will comment on Buffett's intentions. To get to 24.9%, he would have to shell out $655 million at today's prices. But merely edging up to 15% would involve only $43 million in purchases. "You don't know how much of a vote of confidence it is because you don't know how much he is buying," says Guy Moszkowski, an analyst at Sanford C. Bernstein & Co.

More important, Salomon still has to prove that it has transformed itself into a reliable producer of earnings. It is trying very hard to shed its image as a pure trading firm reliant on volatile trading profits. In its second-quarter earnings report, Salomon for the first time broke out results for its second half into customer-driven businesses and proprietary trading. Customer-driven businesses, where Salomon earns a fee on transactions for clients, produce more steady income than riskier proprietary trading for the firm's own account.

The breakdown was impressive. In the first half, Salomon made $613 million in pretax earnings from customer-driven businesses, compared to a paltry $81 million from proprietary trading. That's far more than the $276 million in pretax customer earnings for all of 1992. But the upturn was due mostly to a buoyant market environment, though cost-cutting and a sharper focus on its customers helped.

SALOMON'S BIGGEST SHAREHOLDER IS RAISING HIS STAKE

ELI REICHMAN

TRUE BELIEVERS. And two quarters do not a trend make. While management is committed to building its customer-driven businesses, it has to prove it with sustained results. "Have they really reorganized so the business is less volatile, or not? It is too early to really say the trend is established," says Moszkowski, who still recommends the stock.

Of course, true Buffett believers are unperturbed by such uncertainties. After all, they figure Buffett is an investment wizard and he knows more about Salomon than they do. But with Salomon selling at a p/e ratio above its competitors, it still must prove it can deliver on the market's lofty expectations.

By Leah Nathans Spiro in New York

INSURANCE

BRACING FOR A NEW STORM OF CLAIMS

As hurricanes intensify, insurers pay out big—and try to limit risk

When William M. Gray talks, property and casualty insurers listen—or at least they do now. Gray, a professor of atmospheric sciences at Colorado State University, is known for his on-target predictions of hurricane seasons. He correctly foresaw the severity and number of hurricanes in 1992, a year that resulted in a record $23 billion payout, mostly from damages caused by Hurricanes Andrew and Iniki. Gray's recent 1993 forecast of two hurricanes as intense as Andrew and a 56% increase in the number of hurricane days—days when hurricane force winds are at least 75 miles per hour for a prolonged period—sent shivers down the spines of many insurance executives.

Insurers are now scrambling to conduct a broad reassessment of the way they calculate and price risks, not only of hurricanes but of other natural disasters as well. For reasons that remain unclear—since the number of disasters is just up slightly from a decade ago—catastrophe damages have mounted sharply over the past several years (chart). The heart of the 1993 hurricane season has yet to arrive, and already natural disasters have chalked up $3.9 billion in insured damages. And experts predict more intense hurricane activity in the next decade. Insurers are moving to limit the damage in a variety of ways, from revising underwriting and raising deductibles to proposing a federal insurance program for all natural disasters, not just for flood and crop damage.

Prior to Hurricane Hugo in 1989, no hurricane had caused more than $1 billion worth of damage. And before Hurricane Andrew, which hit Aug. 24, 1992, insurers thought the worst possible windstorm would cost no more than $8 billion. But now, insurers are frantically revising their models. After inputting claims data from Andrew into their computers, Travelers Corp. found, says Senior Vice-President Dale S. Hammond, that the "model used to assess catastrophe losses was low, probably by 30% to 40%." Insurers took note of a study by Boston-based Applied Insurance Research Inc. that showed how Andrew's costs could have jumped from $15.5 billion to $52.5 billion had it hit land about 20 miles further north.

Many underwriters have turned into Weather Channel junkies—insurer United Services Automobile Assn. even has a full-time watcher of the channel c staff. Others are rubbing elbows wit climatologists. Members of State Far Fire & Casualty Co.'s claims departme recently met with Colorado State Ur versity's Gray to see if there was quicker way to determine where a hur cane might hit land. There wasn't-winds can change the direction of a hu ricane. And reinsurer Lloyd's of Londo paid a recent visit to Bob Sheets, dire tor of the National Hurricane Cente "The reinsurance industry is very inte ested in understanding what the risk are," says Sheets. "Hurricane Andre really woke them up." One Lloyd's u derwriter quoted recently in a Lloyd internal magazine remarked: "We no work on the assumption that the futu will be rougher and are turning to ou own advisors, climatologists and eng neers for help in assessing premiums."

COASTAL FLIGHT. Just as much attentio is focused on finding out why catastr phe claims are skyrocketing. Two lea ing reinsurers, Swiss Reinsurance C and Munich American Reinsuranc Co., say global warming and other c mate changes may increase hurrican activity. Scientists such as Greenpeac International scientific director Jerem Leggett think warming produces stro ger hurricanes.

Global warming could have other co sequences for insurers: According to th University of Maryland's Laboratory fo Coastal Research, a six-meter sea-lev rise from higher temperatures woul submerge most of the Florida peninsul In September, executives and insuranc experts will gather at New York-base College of Insurance to discuss ho global warming might affect insurers.

Insurers are also looking for more in mediate solutions. One likely move: hig er deductibles. The average deductib could hit $1,000 by the end of the decad and $2,500 soon afterward, up from th industry norm of $250 or $500.

Insurers would also like to cut bac on writing insurance in coastal areas. I Florida, for example, many are trying t exit the homeowner's market. But th state legislature won't let them pull ou until after this year's hurricane seaso An industry-sponsored group, further, i pushing Congress to establish a feder insurance program to cover all natura disasters. But with lawmakers wary o what could be seen as a bailout, insurer don't expect it to pass anytime soon.

Some insurers express frustration a the turn of events. "We're not meteoro ogists, we're underwriters," says Trave ers' Hammond. Nevertheless, now mor than ever, the industry seems to be a the mercy of Mother Nature.

By Chris Roush in New Have

INSURERS' DISASTER LOSSES

DATA: AMERICAN INSURANCE SERVICES GROUP INC *FIRST SIX MONTHS

INSURED U.S. CATASTROPHE LOSSES
BILLIONS OF DOLLARS

S LEE KOPP THE NEXT 'ETER LYNCH?

ɜ's piling up assets—without the usual big-money sources

ee Kopp considers himself an astute investor in telecommunications, and h over 40% of his clients' 4 million in telecom stocks, had better be. But when ıerican Telephone & Teleıph offered to scoop up ev- share of McCaw Cellular nmunications for $12.6 bil- ı in Ma Bell stock, the tfolios run by Kopp Intment Advisors had not a ıre. "We missed it," he ad- s. "We never had enough ɔrmation on the company, ver had enough conviction buy McCaw stock."

But Kopp owes his inves- s no apologies. Kopp Istment Advisors (KIA), ich recently celebrated its d anniversary, is one of hottest shops in the istment-management business—48% npounded average annual return for ee years ending June 30. That's more n four times the return of the aver- money manager and the Standard & or's 500-stock index, and three times t of small-company stocks. Says Wal- Nelson, whose publication, *Ameri- s Best Money Managers*, tracks intment managers: "If he keeps this he'll be another Peter Lynch."

Not surprisingly, millions of dollars ır in weekly at Kopp's Edina (Minn.) ice. Kopp, who will be 59 next month, rted his money-management firm in summer of 1990 with $20 million in ets, mostly from clients who followed ı from Dain Bosworth Inc., where he s a broker and branch manager for 30 ırs. The money really started gushing early 1992, after word of his knockout % performance for 1991 got around. the end of last year, assets were ırly $250 million, and they've more n doubled since.

OW HAND. What makes the asset ɔwth remarkable is that none of the ney has come from traditional bigk sources: KIA runs no mutual funds, not part of any brokerage firm's sta- of money managers, and has no ge corporate pension plans. Kopp's clients are mainly individuals and all-company pension plans, each with its own portfolio. The minimum account size will rise from $250,000 to $500,000 on Oct. 1. Says Kopp: "It's a move to slow down and control our growth."

KOPP AND ANDERSON: A 48% ANNUAL RETURN OVER THREE YEARS

Kopp's investment style is calm and deliberate. There's no leverage or options or currencies that can turbocharge returns—only old-fashioned stock-picking. What Kopp does differently from most is put more money into fewer stocks. Most portfolios have only 18 to 20 stocks in a handful of industries.

To be sure, that kind of concentrated investment—especially in emerging growth stocks—can lead to some hairy periods, such as the 26.5% plunge in the third quarter of 1990. But Kopp gives his stocks time, and that patience has paid off. For instance, he rallied back after a 13.4% drop in the first half of 1992 and earned a nifty 32.5% gain for the whole year. Even now, two of his top 10 holdings, Network Systems Corp. and Telco Systems Inc., are selling below his average cost (table), but he's sticking with them.

KOPP'S TOP HOLDINGS

Stock	Average cost	Recent price
	Per share	
DSC COMMUNICATIONS	$ 8.70	$60.75
TELLABS	19.96	49.75
EMPI	11.36	26.50
ADC TELECOMM.	15.10	32.75
DIGITAL MICROWAVE	10.24	12.75
CALIF. MICROWAVE	15.42	24.00
MGI PHARMA	9.08	13.75
NETWORK SYSTEMS	11.12	8.00
TECHNE	9.22	14.00
TELCO SYSTEMS	8.16	7.00

DATA: KOPP INVESTMENT ADVISORS

Kopp doesn't pick stocks alone. He relies on Sally Anderson, 51, the former deputy research chief at Dain Bosworth, who joined his firm in late 1991. They draw on leads gleaned from contacts built over their combined 60 years in the stock market. Many of their best investments are in their backyard: ADC Telecommunications, Empi, a medical-device manufacturer, and MGI Pharma, a small pharmaceutical company, are all located in the Minneapolis-St.Paul area.

GUT FEELING. In scouting investments, Anderson crunches the numbers and Kopp scrutinizes the business and the brass. But the two always make company visits together, touring the plant and quizzing managers.

Sometimes, a good investment takes vision. Anderson recalls that when she and Kopp first visited DSC Communications Corp., their largest and, with a profit of 600%, their most lucrative investment, the telecommunications-equipment maker was losing money and suffering product problems. "Lee knew DSC from its better days, and in his gut, he thought we should consider it," she says. "We came away convinced the company's worst days were behind it."

The firm started to accumulate DSC shares and eventually owned 2.3 million—about 5% of shares outstanding. The stake has been reduced to 1.2 million over the past 12 months, but that's 14% of KIA's total holdings. Despite some profit taking, Kopp remains bullish on DSC and telecommunications stocks "because the demand for what they're doing is not going to be fulfilled in six months or a year." Looking toward 1994, he thinks health-care stocks, now 15% to 18% of his holdings, will have a resurgence, and he will add more companies.

Of course, in money management, hot hands often turn icy. Indeed, Kopp tells clients that his oversized returns are unsustainable. He aims to deliver 15% to 20% a year, not 48%. In an era of low interest rates, that would be quite enough to keep his investors in clover.

By Jeffrey M. Laderman in New York

DOUG KNUTSON

BY GENE G. MARCIAL

THEY'RE LACING UP THE GLOVES AT ST. JOE PAPER

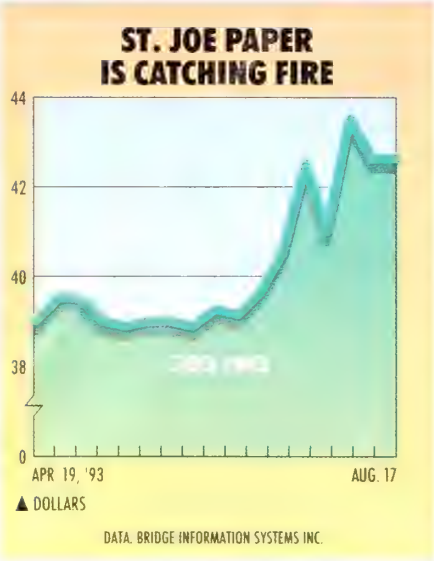
St. Joe Paper is one uppity stock: It trades on the Big Board at 42 a share on a steep price-earnings multiple of 67. So the stock hasn't been exactly enticing to the average investor, particularly since company sales and earnings slumped last year. But it has always intrigued value players, the pros who focus on a company's intrinsic worth based on its assets. Lately the stock has received more attention and rose to a high of 44 a share on Aug. 6, up from 39 a month ago.

What's behind this new surge? Plenty, say several pros who have been snapping up shares. Insiders at the asset-laden company, which is the largest private landowner in Florida, are headed for a big corporate battle, says Douglas Kass, research director at J. W. Charles Securities in Boca Raton, Fla. "The lines are being drawn for a meaningful change of direction at St. Joe," which could lead to the sale of certain assets, says Kass.

Former St. Joe Paper Chairman Jacob Belin and Alfred DuPont Dent, grandson of the late Alfred DuPont (founder of St. Joe) recently filed a lawsuit against current Chairman W. L. Thornton, who is also the chairman of the DuPont Testamentary Trust, which owns two-thirds of St. Joe. The suit seeks to increase from five to seven the number of trustees of the trust, to provide the dissident group led by DuPont Dent with enough votes to influence policy changes at St. Joe.

SUGARCANE ALLEY. The dissidents' primary concern, Kass believes, is the decline in investment returns, which have fallen below the financial needs of the trust and the Nemours Foundation, the DuPont family trust. A company spokesman says he was not aware of any pending asset sale.

Kass figures that based on the company's assets, including 700,000 acres of timberland in northwestern Florida, the stock is worth $100 a share. St. Joe owns a paper mill in Port St. Joe, Fla., that makes linerboard for corrugated containers at 16 company-owned factories. Other assets include a 54% stake in Florida East Coast Industries, whose Florida East Coast Railway provides intrastate freight services. St. Joe also grows sugar in Central Florida and owns three phone companies.



The timberland and paper operations are worth $1.6 billion, or $52 a share, figures Kass, and the railroad interest is $700 million, or $22.50 a share.

"I can sense an asset sale of major proportions coming," says Kass, who figures the paper-timberland operations are the top candidate for sale. The telephone business, worth $3.50 a share, and the sugar company, valued at $5 a share, are ripe for sale, too.

CDI: ITS HELP IS NOW WANTED

What happens to a company when two of its biggest customers fade away? Its bottom line sags, and the stock dives. That's what happened to CDI, a major provider of engineers and other technical personnel to the defense and auto industries. Its stock dropped from 16 a share in 1990 to 6 a year later. It stayed depressed until mid-1993. Now the Big Board stock is showing some life, edging up to 9.

General Motors used to account for 25% of CDI's revenues and the military some 20%. But the business from GM tumbled to 12% and the defense industry dropped to 8% during the last two years. "It's back on firm ground now, both in terms of sales and earnings, and we see the stock hitting the mid-teens in a year or so," says Jerry Levine, research chief at Commonwealth Associates, a New York investment bank. CDI is benefiting from the "outsourcing" trend in Corporate America, says Levine. It has become "more efficient and financially prudent," he notes, for companies to contract personnel for special projects.

Chrysler and Ford, says Levine, came up to fill the void left by GM and the defense department. Also, a host of other companies in the energy, chemical, and electronics-technology industries helped out. Levine forecasts that sales will hover near the $1 billion mark next year, up from an estimated $910 million this year and $855 million in 1992. Earnings should climb to $10 million, or 50¢ a share, in 1994 from $6 million, or 30¢ this year.

The Boston investment firm David L. Babson has acquired a 5% stake in CDI for one of its mutual funds. CDI is "definitely on the rebound," says Babson money manager Eugene Gardner and could grow as fast as industry leaders Manpower and Olsten.

HEALTH-CARE CRUNCH, HAH!

Who's worried about the future of the health-care business? Not Meditrust. As the nation's largest investor in health-care real estate, it has stakes in about 170 facilities in 29 states for combined assets of $1.2 billion. So how is Meditrust faring? Very well, indeed, with earnings and stock on the rise. The stock has gone to 32 from 25 a year ago.

What's Meditrust's strategy? It's something akin to that of a mutual fund. It seeks to produce income for shareholders by providing mortgage financing to diverse health-care facilities, such as alcohol and substance-abuse rehab centers. "Meditrust provides a vehicle to invest in the much maligned health-care business," and carries a 7.8% dividend-yield cushion vs. the S&P's yield of 2.8%, says analyst Donald Hultgren at Raymond James & Associates in Tampa.

The return on Meditrust's investments generates earnings and cash flow from which the company pays out dividends, which have remained fairly consistent, says Hultgren. He expects earnings to rise to $2.25 a share next year from an estimated $2.10 this year. Hultgren see dividends climbing to $2.62 a share next year from 1993's $2.54. The 1992 dividend was $2.46.

One money manager says a big plus in Meditrust is Chairman and CEO A. D. Gosman, who also heads Mediplex Group, an operator of subacute health-care facilities. "He's a terrific dealmaker," says one pro.

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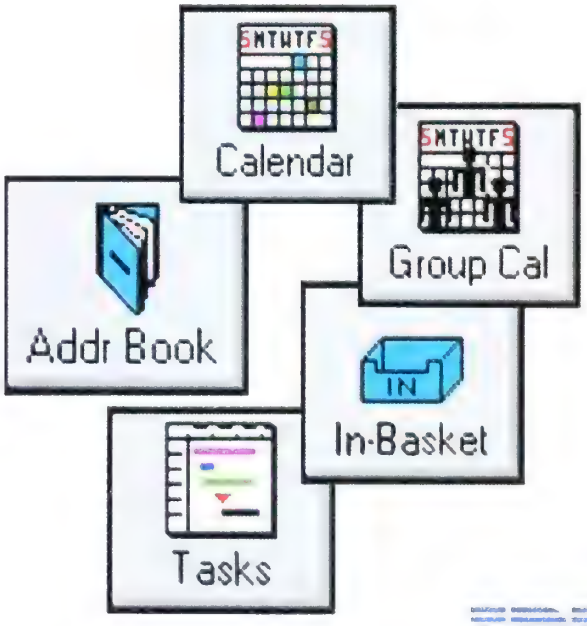

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THE RAGE TO PAGE HAS MOTOROLA'S MOUTH WATERING

Brightly colored, low-priced beepers are opening up a new consumer market

Two teenagers and two working parents add up to one monumental headache when it comes to coordinating schedules—or even just staying in touch. So about a year ago, Howard and Linda White of Highland Beach, Fla., outfitted the family with pagers. After that, when 43-year-old Howard's job as a corporate pilot took him out of town unexpectedly, he could beep 17-year-old Matt and 15-year-old Jillian to let them know he wouldn't be able to pick them up from school. To make things even easier, the family soon developed shorthand codes, such as 86, which means "cancel plans." Says IBM executive Linda, 41: "It's really a great way to stay in touch."

That's exactly the message Motorola Inc., which built the pagers the Whites and about 2.9 million other Americans clipped to their belts last year, wants to send to other families. With snappy ads and modish designs in colors such as Bimini Blue and Vibra Pink, the electronics giant is out for every parent, teenager, and citizen it can snag. Consumers account for just 15% of the 15.3 million pagers in use in the U. S., but they're the hot segment, growing 25% annually, compared with 20% for the overall $2.8 billion industry, says market researcher Yankee Group.

HEALTHY MARGINS. Motorola, which controls 85% of the pager market, is the big winner. In 1993, total revenues from sales of handheld units and paging equipment for network operators should grow 30%, to $1.6 billion, predicts Anthony Langham, senior vice-president for NatWest Securities Corp. With relatively healthy 12% operating margins, pagers should play an important role in helping the company score a 66% jump in net income, to $954 million, on a sales increase of 23%, to $16.4 billion, he says.

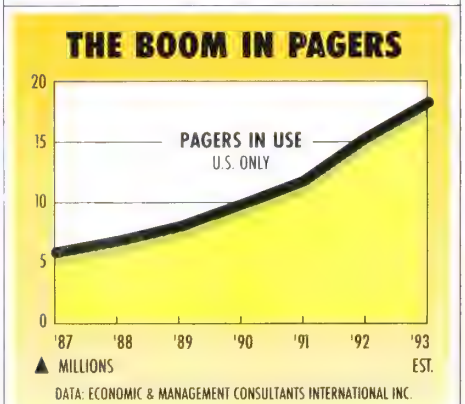
But the pager rage will do more than help the bottom line. The quest for customers such as the Whites has dragged Motorola back into consumer marketing for the first time since it sold off its Quasar TV line in 1974. The experience of making pagers for a mass market could give the company an important foundation from which to tackle other emerging markets, including wireless modems for personal computers and so-called personal digital assistants (PDAs) such as Apple Computer Inc.'s Newton. Says Robert Fraser, electronics buyer for the 25-store ABC Warehouse chain: "Pagers afford Motorola a tremendous avenue to get name-brand awareness."

Motorola jumped back into consumer marketing two years ago when it saw that declining prices made the easy-to-use devices practical for ordinary citizens—not just for doctors or Wall Street traders. The price for a basic pager that displays the number of the person trying to reach you is $89, down 45% from 1988. The average monthly fee for basic service is $15, vs. $25 in 1987, says industry trade group Telocator.

To get that message out to consumers, Motorola recruited marketing pros to its Boynton Beach (Fla.) paging unit, led by Rob Pollack, a former General Electric and Black & Decker marketer. To emphasize pagers as fashion accessories, Pollack's crew not only peddles pagers in bold colors but also sells packages of three sleeves, in teal, fuchsia and silver, that slip over a pager and can coordinate with the wearer's clothes.

SOOTHING VOICES. To pull people into stores, Motorola rolled out an ad campaign last spring created by McCann Erickson. The agency, which had worked for Sony Corp., came up with print and TV ads featuring such vignettes as the young parents who leave a pager with a baby-sitter as they head out to dinner and Little Leaguers who beep Mom when the game is rained out. "Motorola certainly has taken the lead in encouraging consumer appeal," says A. Robert Handell, chief operating officer for MobileComm. Handell credits the ads with spurring more consumer sales for his Jackson (Miss.) paging network.

Motorola is now expanding the boundaries of the paging market. A new credit-card-size version due in September can be inserted in Apple's Newton and Tandy's Zoomer to give those PDAs paging capabilities. The company also plans to test a cellular-phone/pager unit and is already testing voice page, a system



at allows a pager to store a voice mes-
ge, just as an answering machine
ould. Then there are the more sophis-
ated alphanumeric pagers (starting at
out $179), which can display data such
stock prices and news flashes. And fi-
lly, there's two-way paging, which
nds an acknowledgement that the mes-
ge has been received. Two-way paging
s received approval from the Federal
ommunications Commission and will
obably be available by yearend.

Because these and other forms of wire-
ss communication are expected to have
siness and consumer uses, Motorola is
w attempting to spread the marketing
essage across the corporation. The pag-
g sales force has already been put
rough classes in consumer marketing,
d other employees will soon follow. At
e same time, a global committee headed
Christopher Galvin, a grandson of the
mpany founder and assistant chief oper-
ng officer, is crafting the first company-
de marketing strategy. Notes Pollack:
he company understands the importance
building brand image."

CKLASH? Motorola also understands that
ngs aren't as simple as when it sold
s and radios. Although pagers are sold
Target, Circuit City, Macy's, and hun-
eds of other stores, they work only if
ey're hooked up to a network, so Moto-
a uses Metromedia and other opera-
s to resell the hardware to stores and
en sign up customers for the service.
e operators tend to emphasize their
vice brands, not the manufacturer's
and. Then there's the image problem:
gers have become so popular with teens
at schools have started banning them in
ssrooms. Also, there's the association
th drug dealers. To try to counter that,
otorola print ads prominently display
the *Good Housekeeping* seal.

Any possible problems are far outweighed by paging's sheer potential. The international market, which is already as big as the U. S., is growing rapidly. In China alone, Motorola expects to sell 3 million pagers this year, up from 100,000 in 1990. And even as America's technophiles begin using fan-
wireless gizmos such as PDAs, the
nestic market is expected to remain
ong. "Pagers are going to be the low-
t workhorse of wireless communica-
ns for today and tomorrow," asserts
arlie Johnson, president of Pactel Pag-
. Just ask the Whites: When son
tt enlisted in the Air Force Academy
s summer, along went a new pager, to
ep him in touch.

By Lois Therrien in Boynton Beach, Fla.

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– Jean Sherman Chatzky, *Smart Money*, June 1993

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MANAGEMENT

REVEILLE FOR DEC'S SLEEPY SALES FORCE

Ed Lucente is revamping how DEC hires, trains, and pays its people

Edward E. Lucente had been on the job for less than a month last May when he began insisting that Digital Equipment Corp. hike its fiscal 1994 sales target by $350 million. That was just a 2.5% increase for the $14 billion computer giant—not enough to change its fortunes or put undue strain on the organization. But it was enough to let everybody at DEC know that the new vice-president for sales and marketing wasn't going to be like any of his predecessors. Clearly, this guy planned to play a major role in turning the struggling computer company around and plotting its future. Sure enough, the higher sales plan, adopted just before the start of fiscal 1994 on July 4, has become known around DEC as the "Lucente tax."

After barely four months at the No. 2 U. S. computer maker, the 53-year-old Lucente is already a key player on CEO Robert B. Palmer's hand-picked management team. His prodding of the executives responsible for setting budgets and his aggressive plan for reshaping DEC's notoriously weak sales force have him pegged by insiders and analysts as a likely No. 2 to Palmer, perhaps as chief operating officer.

Lucente clearly has the credentials—and the ambition. At IBM, he was a star, heading the important New England sales territory by age 32. He ran manufacturing and development organizations at IBM as well as its corporate strategy and planning group. In 1988, he took over U. S. sales and marketing and later got to run IBM's Asia/Pacific operations out of Tokyo. Lucente "had the potential to be among the handful to run the company," says Texaco Vice-Chairman and Chief Financial Officer Allen J. Krowe, a former CFO at IBM.

DETOUR. At IBM, Lucente adopted the clean-cut style and blue suits that were the norm. Only his French cuffs and an occasional flashy tie set him apart from Armonk's buttoned-down legions. Few who met the serious-minded manager suspected that as a teenager in Pittsburgh, he had been a doo-wop singer. "He's kind of sensitive about that," says George H. Conrades, who succeeded Lucente as IBM sales and marketing chief.

Leaving IBM in 1991 over a disagreement with then-CEO John F. Akers over strategy, Lucente was lured to phone-equipment maker Northern Telecom Inc. by CEO Paul G. Stern, another ex-IBMer. But Lucente left soon after Stern quit last January. He arrived at DEC after what Palmer calls its "most exhaustive" search yet for an executive who could stir up DEC's relatively laid-back sales force of 20,000.

Historically, DEC and IBM have approached the computer market from opposite directions. At IBM, the founder and virtually all the top executives who succeeded him wer supersalesmen. At DEC, superior eng neering was prized above all. Kennet H. Olsen, DEC's co-founder and an eng neering purist, refused to pay commi sions to salespeople, even though all DEC's competitors did. Olsen felt that salaried sales force would better serv customers.

DEC'S NEW SALES TUNE

Under new sales chief Ed Lucente, DEC is

- ▶ Recruiting aggressive salespeople
- ▶ Making regular sales training mandatory, not optional
- ▶ Measuring customer satisfaction more accurately via surveys
- ▶ Factoring customer survey results into compensation plans

DATA: DIGITAL EQUIPMENT CORP

But soon after Palmer took over fro Olsen last October, he saw that an a out sales effort would be needed if DE was to pull out of its four-year slum Since November, DEC has been pushin a hot new line of computers called Alph AXP. But hardware speed alone won restore the company's fortunes. "DE will have systems as good as anybody's says Kemper Securities Group Inc. an lyst Joseph Payne. "Will it have a sal force as good? It's a big question."

NO COOKBOOK. And one for which L cente has some ready answers. He thoroughly overhauling how DEC hire and trains its salespeople. No more rel ing on transfers from engineering marketing—Lucente has begun recrui ing experienced salespeople and eage college grads. He's making sales trainin mandatory, too. And instead of inte nally auditing customer satisfaction, he hiring outside canvassers. The result he says, will affect the performanc evaluations of top sales executive and, eventually, those of the entir sales force. The trick, Lucente say "is to make sure we get all of ou focus on the customer and off inte nal issues."

Lucente says his biggest job ha been persuading DEC's sales orga ization to stop expecting a simpl formula. "I always get concerne when people look for recipe 'We're this or we're that,'" he say The people trying to sell comple information systems to solve specif business problems should "not go t Maynard [DEC's Massachusetts hea quarters] for some cookbook of what t do in one situation and what to do in a other."

DEC's customers say it's too early t judge what impact Lucente is havin but he's at least inspiring the troop "Eight weeks ago, I wouldn't have give a plugged nickel for [creating] a stron field organization," says a DEC sales ma ager. "That's not the case anymore." L cente needs more converts: Even as DE reported a $120 million operating prof for the fourth quarter, ended July 3—i first in two years—the company di closed that product sales declined durin the quarter and the year. The proof Lucente's revamped sales organizatio will be in reversing that dismal trend.

By Gary McWilliams in Bosto

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ED BY RON STODGHILL II

HEILA WELLINGTON: CHIPPING AWAY T GLASS CEILINGS

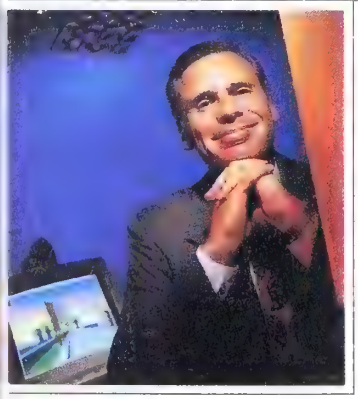
1962, when a new advocacy group called talyst emerged to fuel advancement of men into the corpo- e world, its mission s to help with such sics as resumé writ- , interviewing, and eer counseling. Now t women make up rly half the U. S. rk force—but only 5% senior management— challenge is more nplex: breaking down the "glass ceiling" that prevents men from reaching the top.

That task falls to Sheila W. Wellington, 61, who replaced talyst founder Felice N. Schwartz as president in July. At st blush, she seems an odd choice for the job. A Wellesley llege graduate with two master's degrees from Yale Univer- y, in public health and urban studies, Wellington has no ord in women's advocacy. She worked for 13 years as an ministrator in the mental-health field. In 1987, she became first female secretary of Yale.

Look a little deeper, though, and her appeal makes sense. Yale's secretary ("I certainly heard my share of steno-pad es," she recalls), Wellington's specialty was forging public- vate ties with surrounding New Haven, including a $50 mil- 1 investment in city-development projects. Relationship- ilding is what Catalyst needs. Opportunity these days ans cajoling companies to recruit more, form training and ntoring programs, and devise new work-family policies. ould women have half the leadership jobs?" she asks. "Not essarily. But everyone should have a fair shot."

By Rochelle Shoretz in New York

ARY EICHHORN: CAN HP LIPSE SUN'S WORKSTATIONS?



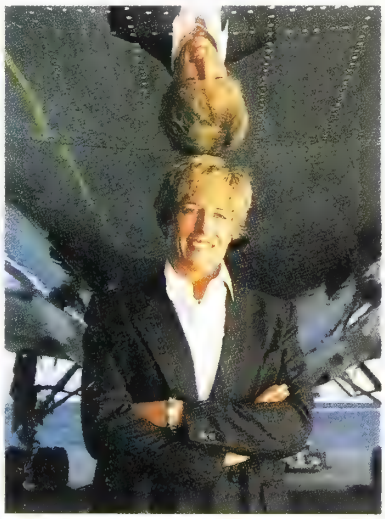
In 1991, Hewlett-Packard Co.'s $476 million purchase of workstation pioneer Apollo Computer Inc. was looking like a dog. By adding Apollo's business to its own in 1989, HP had become No. 1 in workstations. But delayed products and software flip-flops had irritated customers, dropping it to second, behind Sun Microsystems Inc.

Enter Gary B. Eichhorn, 39, a former Digital Equipment rp. executive tapped in 1991 to run HP's workstation unit. quickly appeased customers by going into the field with his gineers to see what users really wanted. And he vaulted into fast-growing new markets by shifting from pricey machines aimed at the scientific market to lower-cost workstations suited to Wall Street traders and service representatives. In the first half of this year, the Hewlett-Packard unit grew at 15% versus Sun's 14%, says Dataquest analyst Lisa Thorell. By yearend, she expects the unit to turn its first profit since the Apollo acquisition.

That's fine. But Eichhorn, a Brooklyn native who latched on to computers when he was studying to be a research scientist at Syracuse University, worries most about the future. Faster microprocessors from Intel Corp. and new software from Microsoft Corp. are threatening to transform any personal computer into a workstation. So, he's rallying Sun and other traditional rivals such as IBM and DEC to work together in an effort to fend off Microsoft. Rather than sell unique versions of the Unix operating system, Eichhorn has persuaded them to create a common Unix system so customers can share applications. While keeping pace in computers creates plenty of stress, Eichhorn vents his on a punching bag hanging in his basement. "It's great therapy," he says. But not as good as regaining the top spot in workstations.

By Gary McWilliams in Boston

GRACE ROBERTSON: PILOTING A SUPERFAST ROLLOUT AT BOEING



To this day, Grace Robertson swears she didn't volunteer. Yet somehow, in the throes of Boeing Co.'s effort to slash away at its costs and shorten manufacturing cycles, the 40-year-old engineer landed in the hot seat.

It happened last year, when the head of Boeing's Everett Div. asked his top executives if anyone wanted to take on the challenge of designing and building a new version of the Boeing 767 in less than three years. Robertson thought the task was impossible. But her bosses picked her anyway.

A low-key Wyoming native who distinguished herself over 14 years as a crack engineer—mostly in Boeing's defense programs—Robertson now must deliver on an ambitious promise the planemaker made to United Parcel Service Inc. last January. When UPS ordered 30 aircraft, Boeing guaranteed that it could design and build a new, all-cargo version of the 767 jet in a mere 33 months—far faster than the usual cycle time of 42 months. The price it quoted meant slashing development costs dramatically.

Robertson's strategy has been to gather all 400 employees working on the new freighter into one location and organize them into "cross-functional" teams. By combining people from the design, planning, manufacturing, and tooling sectors, the teams speed up development and cut costs by enhancing communication and avoiding rework. So far, Robertson's group is on schedule and on budget. As for Robertson herself, impossible has taken on a whole new meaning.

By Dori Jones Yang in Everett, Wash.

THE SENATE

AND A GOP STAR SHONE IN THE EAST...AND THE WEST...

Out to grab the Senate, the party is recruiting glitzy candidates

With President Clinton languishing in the polls and Democrats pushing a big tax increase, the GOP is starting to smell blood. Come 1994, Republicans figure, incumbent Democratic senators will be battered by Republican "tax and spend" attacks and Perotnista anger at Washington business-as-usual.

And this time, the GOP is determined not to blow it. Over the years, the party has had trouble capitalizing on its opportunities, in part because many of its most promising prospects, especially business leaders, have been reluctant to take their lumps in the political arena.

Next fall, Republican strategists vow, will be different: They claim they can gain the seven seats needed to control the Senate. To meet their goal, GOP leaders have kicked off what might be called "Star Search '93," a national talent hunt aimed at finding charismatic challengers to knock off vulnerable Democrats.

CASTING CALL. "If I could order from central casting," says the maestro of the GOP recruiting effort, Senator Phil Gramm (Tex.), "I would want a businessperson, about 50 years old, three pretty children, a nice spouse, who has never run for office but has been involved in government and who understands fund-raising."

Gramm is finding some promising contenders. "I've been in elections where it was difficult to persuade your first, second, or third choices to get in," says veteran GOP strategist Charles Black. "This year, we seem to be getting our best candidates." Among the most promising recruits: actor/lawyer Fred D. Thompson in Tennessee, businessman Colin R. McMillan in New Mexico, and Representative Jon Kyl in Arizona.

The GOP still has a way to go before it can claim to have overcome its traditional candidate-recruitment difficulty. But GOP partisans are certain that Clinton's weakness is the best tool they could have. "We're recruiting people you would never have been able to convince to run for Congress before," gloats Representative Bill Paxon (N.Y.), chairman of the National Republican Congressional Committee. "There has been an explosion of interest in what is going on in the Congress."

In Roswell, N. M., McMillan is leaning toward taking on two-term Democratic Senator Jeff Bingaman. A 58-year-old former Assistant Defense Secretary, McMillan has a lengthy resumé of private-sector accomplishments: oilman, rancher, chili-pepper producer, and chairman of a solvent savings and loan association. "There is a pretty clear anti-incumbent feeling out here," says McMillan, a father of four and grandfather of five. "Voters are looking for people who understand government b haven't spent their life in it." Sti McMillan faces an uphill fight. "He giv the Republicans an opportunity to co test the seat," says Stuart Rothenber editor of *The Rothenberg Report*, a pol ical newsletter. "But his chances depe on the quality of the campaign and n tional economic conditions."

The GOP talent search is more wid ranging than past efforts. In Hawa the party has even reached out to Ors Swindle, who coordinated Ross Pero national campaign last fall. Swindl though interested, hasn't declared h candidacy. Pro-choice Republican K Bailey Hutchison, who unseated Sen tor Bob Krueger (D-Tex.) in June, repr sents another type of candidate the G is seeking—a fiscally conservative, s cial moderate capable of luring righ wing and suburban centrist voters.

In Ohio, party strat gists think former Nation Institutes of Health Dire tor Bernadine P. Healy fi the bill. Aided by Clev land Browns owner Arth B. Modell, a longtim friend with ties to th state's power structur Republicans are trying persuade Healy, 48, to ru for the seat of retirin Democratic Senator H ward M. Metzenbaum Healy is a distinguishe cardiologist but a politic novice, already emba rassed by reports that sh has not voted in a GOP pr mary since moving Ohio. While Healy po ders, popular Lieutena Governor Michael DeWi and state Senator Euge J. Watts have jumped in

Meanwhile, Gramm h found a literal star Thompson to run for th Tennessee seat former held by Vice-President A Gore. Thompson first came to prom nence in 1973 as GOP counsel to the Se ate Watergate committee, but he is be ter known as a character actor whos roles include former American Expre Co. CEO James D. Robinson III in HBO *Barbarians at the Gate* and the Whi House Chief of Staff in the current *the Line of Fire*. Thompson, 50, says h has rebuffed recruiting efforts "man times" but changed his mind after watc ing Congress struggle with deficit r duction. "It's going to require some lea ership that career politicians cann exert," he says. "If people don't step i

THE '94 STAKES

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CURRENT SENATE LINEUP

DEMOCRATS	REPUBLICANS
56	44
UP FOR GRABS ▶ 21	13
7 STRONG, 9 LEANING	4 LEANING, 4 STRONG
8 TOSS-UPS	

SEATS NEEDED FOR GOP CONTROL 7

n the private sector, then we're nev-
going to make any progress."
n Virginia, Republicans boast a trio
potential high-profile candidates: for-
National Security Council aide Oli-
North, ex-Reagan Budget Director
nes C. Miller III, and former U. S.
orney Jay B. Stephens, who prose-
ed Marion S. Barry Jr., the former
yor of Washington. The Democrats,
anwhile, are engaged in fratricidal
ghting. Senator Charles S. Robb nar-
rly escaped indictment on charges
nming from the taping of Democrat-
Governor L. Douglas Wilder's car-
ne conversations. Now, a vengeful
der has announced for Robb's job.

CE-SITTERS. Elsewhere, many of the
's strongest potential contenders are
ging back. Former Tennessee Gov-
or Lamar A. Alexander, a possible
sidential candidate in 1996, is balking
appeals to take on Democratic Sena-
Jim Sasser. In Massachusetts, Gov-
or William F. Weld, who would have
n the strongest challenger to 31-year-
eran Senator Edward M. Kennedy,
decided to seek a second term in
statehouse. The GOP may have to
le for former Transportation Secre-
y Andrew H. Card Jr., who lags far
ind Kennedy in the polls. And former
v Jersey Governor Thomas H. Kean,
political pros think would mount a
ong challenge to Democratic Senator
nk R. Lautenberg, is still weighing
options.

Gramm has reacted to the fence-sit-
by redoubling his efforts. It took
trips to Tennessee to sign up
mpson. And Gramm, who has been
vily criticized for worrying more
ut his own Presidential ambitions
n the party's prospects, has respond-
by beefing up the National Republi-
Senatorial Committee. He has
ught in Senator John McCain (Ariz.)
focus on recruiting and has devel-
d a grass-roots network of state par-
chairmen to scout out and relentless-
pursue potential stars.

As the GOP has learned, however, re-
itment alone is no guarantee of suc-
s. Such highly regarded hopefuls as
ner Attorney General Richard L.
rnburgh, who ran in a 1991 Senate
cial election in Pennsylvania, and mil-
y hero Pete Dawkins, who sought a
v Jersey seat in 1988, ran miserable
mpaigns. To have a realistic chance
aking back the Senate for the first
e since 1986, Gramm will have to do
etter job of signing up some proven
vote-getters who are hanging back.
l the Republicans must run on more
n ritual opposition to Clinton poli-
. Otherwise, the party's bright prom-
of 1993 could prove as ephemeral as
ooting star.

By Richard S. Dunham in Washington

"Edith says I'm too obsessed with sports, Doc — should we punt or go for it ?"

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SOCCER

THE SELLING OF THE WORLD CUP '94

Can the $1 billion extravaganza finally hook Americans on soccer?

Forgive Alan I. Rothenberg if he sounds a little like a cheerleader. That's his job.

To the 24 international teams that will compete in the U. S. next year, the World Cup tournament is a chance for soccer immortality. To the 89-year-old Federation Internationale de Football Assn. (FIFA), the group that stages the cup, and to Rothenberg, president of the U. S. Soccer Federation, it's a $1 billion marketing and promotional extravaganza that's also designed to entice Americans to finally embrace the sport. "Our plan is to open the world's largest market to the world's most popular sport," says Rothenberg.

The numbers Rothenberg, head of the 1994 World Cup organizing committee, rattles off are impressive: 2 billion people are expected to watch the final match of the 52-game tournament on TV—16 times the number that saw this year's Super Bowl. But will even that extreme case of soccer fever be enough to infect a stubbornly resistant America?

NO KICK. Since 1960, six pro soccer leagues have come and gone in the U. S. Currently, there are three in operation, though none has a national TV contract, and teams such as the Buffalo Blizzard and Colorado Foxes play before tiny crowds. Besides, the U. S. national team is unlikely to be around for the finals on July 17 at the Rose Bowl in Pasadena, Calif. In 1990, the U. S. team made it to the finals for the first time in 40 years. It lost all three of its games.

Even Rothenberg is testimony to just how difficult it has been to hook Americans on the sport. After collecting investments in a pro franchise in 1977 from the likes of Jack Nicholson and Linda Ronstadt, Rothenberg, an L.A. entertainment lawyer, was forced to unload the money-losing Los Angeles Aztecs two years later. "We barely got out alive," he says now.

THE U.S. WAS A RARE FINALIST IN 1990

That hasn't stopped Rothenberg and his 160-member staff from assembling a marketing and promotional blitz. ABC and ESPN jointly bid a relatively paltry $23 million, but international TV rights went for $275 million. And a lineup of corporate sponsors that includes Coca-Cola, General Motors, and Adidas has paid more than $250 million in fees to the tournament and plans to spend three times that amount on promotions. On Aug. 9, Rothenberg's World Cup USA 1994 and Polygram cut a $100 million deal that will include three music concerts linked to the games and televised worldwide. Rothenberg estimates that the total take will surpass $1 billion, making it the most lucrative event in the sport's history.

To provide as much exposure to the game as possible, the U. S. organizing committee has reserved two-thirds of the 3.6 million tickets for American buyers—and the 1 million made available so far have sold out. "There should be a tremendous amount of sampling among Americans because of all the excitement," says Jay Coleman, chief executive of Entertainment Marketing Communications Ltd., which markets major entertainment events. But "the question is whether they'll get turned on by the game."

ETHNIC REACH. Although an estimated 15 million Americans play soccer—the vast majority of them under 18—it has never achieved the following of baseball, football, and basketball. The lack of a big-time college feeder system, a high-profile event in the U. S. such as the World Series or Super Bowl, and low scoring are possible reasons. And since Brazilian superstar Pelé retired years ago, there have been few big names for young players to emulate. "I mean, you want to be like Mike, so you watch basketball," says Jonathan Mandel, senior vice-president at Grey Advertising Inc. "Who are you going to be like in a soccer game?"

So why are so many blue-chip advertisers queuing up for the World Cup? For one thing, most of the sponsors are major international players. In fact, many of the biggest sponsors, including candymaker Mars Inc. and MasterCard International, were signed up by ISL Marketing, which represents FIFA, soccer's Zurich-based governing body. Mars also got on board because the U. S. games are likely to be a relatively direct way to market to Hispanic-American consumers.

But from his cramped offices in Century City, Alan Rothenberg is thinking bigger than just America's Hispanic market. He points to the success of recent regional games, including a match between the U. S. and German teams that nearly sold out Chicago's Soldier Field as proof that soccer's fortunes are on the upswing. Still, it may be a while before you hear someone look up from the sports page on Monday morning and say: "Hey, how 'bout those Buffalo Blizzards."

By Ronald Grover in Los Angeles

SOCCER'S CUP RUNNETH OVER

NON-U.S. TV RIGHTS	CORPORATE SPONSORS	TICKET SALES	CONCESSIONS, PARKING	VIDEOS, ALBUMS, CONCERTS	LICENSED AND DIRECT-SALES MERCHANDISE	WORLD CUP USA COMMEMORATIVE COINS	U.S. TV RIGHTS	TOTAL
$275 MILLION	$250 MILLION	$210 MILLION	$120 MILLION	$100 MILLION	$85 MILLION	$25 MILLION	$23 MILLION	$1.09 BILLION

DATA: WORLD CUP USA 1994, BUSINESS WEEK ESTIMATES

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American Gold (12/85)	48.49	4.76	10.00
Automotive (6/86)	25.21	15.60	15.28
Biotechnology (12/85)	-3.36	25.26	17.25
Broadcast and Media (6/86)	23.34	14.61	15.24
Brokerage & Investment Mgmt. (7/85)	43.68	17.18	9.18
Chemicals (7/85)	2.09	9.96	17.71
Computers (7/85)	28.77	11.37	10.67
Construction and Housing (9/86)	17.79	13.48	12.84
Consumer Products (6/90)	17.23	NA	16.25
Defense and Aerospace (5/84)	27.57	6.68	6.61
Developing Communications (6/90)	37.55	NA	24.13
Electric Utilities (6/86)	19.14	15.11	9.73
Electronics (7/85)	43.85	13.66	5.94
Energy (7/81)	19.60	9.75	7.03
Energy Service (12/85)	31.80	9.34	3.18
Environmental Services (6/89)	4.75	NA	3.41
Financial Services (12/81)	29.00	17.45	18.34
Food and Agriculture (7/85)	9.50	18.24	19.28
Health Care (7/81)	-10.36	18.61	19.59
Home Finance (12/85)	27.39	21.14	18.22
Industrial Equipment (9/86)	25.72	8.44	8.39
Industrial Materials (9/86)	5.20	5.53	9.68
Insurance (12/85)	25.23	17.85	12.63
Leisure (5/84)	25.26	13.24	18.79
Medical Delivery (6/86)	-12.60	19.22	9.80
Natural Gas (4/93)	NA	NA	NA
Paper and Forest Products (6/86)	8.36	5.87	9.30
Precious Metals & Minerals (7/81)	39.50	4.73	4.67
Regional Banks (6/86)	26.78	22.59	15.67
Retailing (12/85)	18.54	21.32	18.36
Software & Computer Services (7/85)	51.50	20.42	19.17
Technology (7/81)	40.53	17.31	13.83
Telecommunications (7/85)	35.90	18.72	20.07
Transportation (9/86)	35.40	18.66	15.09
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2r

RETAILING

THE BIG STORE MAY BE ON A BIG ROLL

This time, Sears' strategy is tightly focused, and sales are surging

Can you really blame anyone for responding with an emphatic ho-hum to news of Sears, Roebuck & Co.'s latest turnaround effort? What is this, the third, fourth, or fifth strategy in so many years? Remember the 1989 "everyday low prices" plan that drew lawsuits charging false advertising? That was quickly followed by "power formats," an abandoned attempt to break the stores into boutique-like departments. And what became of the brief foray into women's fashions two years back?

It's a sorry record. But Sears Merchandise Group CEO Arthur C. Martinez is out to prove that this time will be different. The former Saks Fifth Avenue executive, head of the Big Store for just a year, is plotting a new course. Unlike past efforts to revive the retailer, which were tentative and ultimately rejected, Martinez' strategy is broad and coordinated. Sure, he's doing some things Sears has tried before, such as targeting women and emphasizing apparel. But this time, he's pouring more resources into the effort, reshaping Sears into a highly focused organization. "We have a consistent strategic message," explains Martinez. "We will not flop around like a fish."

MARTINEZ WITH LIEUTENANTS BERN (LEFT) AND PAGE: MORE ROOM FOR WOMEN'S APPAREL

"NO QUESTION." Martinez has proved willing to sweep away outmoded Sears traditions. At a company long known for lifetime employment and homegrown management, he's recruiting outsiders into senior positions, including a group president's post. He has shuttered money-losing operations, including the venerable catalog business. And he's opening the doors to such radical notions as letting customers use other charge cards than Sears'.

The changes are already delivering results. During June and July, Sears posted double-digit increases in stores open a year or more, making it the only big retailer besides Wal-Mart Stores Inc. to log anything more than trivial gains (chart, page 84). During the second quarter, the merchandise group posted earnings of $162.5 million on sales of $6.8 billion, compared with $65.3 million on $7.6 billion in sales the year before. Although the company's Allstate Insurance Co. unit dwarfed those results, with $371.8 million in earnings, the improvement at the merchant is sparking talk of a revival. The stock reflects that chatter: At around 53, it has jumped some 36% in the past two months. Says PaineWebber Inc. retail industry analyst Margo McGlade: "There's no question it's a turnaround."

Martinez isn't willing to go that far. "We have a long journey ahead of us," he says. Although the company has completely revamped its women's apparel offerings and moved toward trendier fashions, it still isn't the first store most middle-income working mothers think for a new suit or dress. And many ba boomers refuse to set foot in the stor remembering the poor service or shal presentation. "They have to overcome big image problem," says Sid Doolittle Chicago retailing consultant.

And a big competition problem, t Sears is besieged on all sides by riv snatching pieces of its broad busine lines. Aggressive discounters such Circuit City Stores, Fretter, and B Buy are eating into its consumer-el tronics sales. Home Depot Inc. h grabbed customers from its home-i provement section, and an array of tailers, including a revived J. C. Penn Co., have captured the middle-class male shoppers Martinez covets.

This repair effort had better succe though, because the spotlight is on t Big Store as never before. It no long has the profits of Sears' lucrative De Witter, Discover & Co. financial-servi group or its Coldw Banker Real Est Group to fall back Dean Witter was sp off to the public a Sears shareholders ea er this year, and Co well Banker will be s by yearend, partly still the cries of inv tors who had grown creasingly angry at t merchandising grou never-ending drag their stock.

The moves, alo with the sale of 20% Allstate, will raise m than $4 billion and silencing shareholder tivists—for the time ing. Sears must n count on its long-aili retail operation to p duce growth and ke investors happy. Th will be a challenge. The merchant, w $32 billion in sales last year, or 61% the company's total, contributed o 12% of Sears' income before spec charges, figures A. G. Edwards & So Inc. retail analyst Don Spindel.

Martinez, age 53, says the heat h been on all along. "I felt a sense of u gency even before the restructurin he says. "We have to get this compa turned around." After arriving fr Saks, where he had come up throu the finance side to become vice-cha man, he spent four months studyi Sears' problems. Then he acted: In Ja uary, he announced the end of the 1 year-old Sears catalog, which had be

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losing over $100 million annually for the past five years. He also closed 113 unprofitable stores and cut 50,000 people from Sears' 350,000-strong payroll. An additional 3,400 senior staffers, including close to 400 of the 859 store managers, took advantage of a generous early-retirement program. All told, the restructuring is expected to save $300 million annually by 1994.

GRUNGE AND BELLS. At the same time, Martinez began moving to revamp Sears' retailing strategy. He accelerated a five-year, $4 billion store-refurbishing effort aimed at the 500 of Sears' remaining 798 stores that need face-lifts. The effort will be funded entirely from the merchandise group's cash flow. He aims to increase the space devoted to apparel by 20%, mainly by moving Sears' furniture offerings into a new chain of shops dubbed Homelife. Clothing accounted for only 26% of retail sales last year but produced 64% of the megamerchant's operating profits. And with profit margins in the company's traditional hardgoods lines, such as consumer electronics, being heavily battered by discounters, Martinez spies an opportunity to make up the difference with skirts and blouses.

So far this year, for example, Sears' junior apparel business has logged sales increases of 30%. Under the guidance of Group Vice-President Dorrit Bern, an industry hotshot the retailer lured from Federated Department Stores Inc.'s Bon Marché chain six years ago, the company added name brands such as Union Bay and ventured into fashion trends such as grunge and bell-bottoms. Similarly, Vice-President Janice E. Page has spiffed up Sears' once-dull lingerie offerings.

There's certainly room for Sears to do more. It stocks almost no petite sizes for women, a line that analyst McGla believes could generate as much as $4 million in sales over the next five yea Large sizes have received similarly sh shrift. But Sears still has a central pr lem to overcome with its women c tomers, concedes apparel group Pre dent Robert L. Mettler: "They do think of us for fashions."

That's particularly galling to Mar nez, because the typical Sears shopper a woman from 35 to 64 years old with median household income of $33,00 Martinez says women make 88% of t purchases in home fashions, 70% Brand Central, the store's consume electronics department, and 40% in hor improvement. Unfortunately, they're us ally walking past Sears' clothing d plays. To catch their attention this fa Martinez will unveil a print and tele sion ad campaign designed to enti women into the revived fashion depa ments. To fund this effort, Martin boosted the 1993 apparel ad budget 20 to $190 million.

If the ads draw more shoppers in the stores, Martinez wants to make su they'll be treated well when they g there. He has stepped up the training salespeople, teaching them such basics

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w to greet shoppers, offer help, and se sales. The company is also free- salespeople to serve customers by fting such tasks as restocking shelves nonsales staff. The result? "We've n noticeable improvement" in consu- r attitudes towards Sears in recent nths, says Christopher Ohlinger, pres- nt of Service Industry Research stems Inc., which tracks cus- ner feelings toward retailers.

.OR-COORDINATED. To help with makeover of Sears' hidebound ture, Martinez has been aggres- ely recruiting fresh talent. He aside for outsiders 100 of the re-manager positions vacated ough the early-retirement pro- m, and two of seven regional- nager posts as well. He recruit- apparel chief Mettler from May partment Stores Cos.' Robin- 's stores, where he was chief ecutive. Already, Mettler has shed the store into women's pe- sizes and developed a system to ke Sears stores more attractive by phasizing a color-coordinated approach displaying clothes.

The new regime has also begun to its stamp on the company's tradi- nal hard lines. To make the retailer re competitive, Martinez slashed consumer-electronics prices by as much as 10% last year and trimmed some home-improvement prices as well. The cuts helped boost home-improvement sales, for instance, by more than 17% this year. Over in the furniture department, Martinez has decided to move the $1 billion business out of the stores. He argues that the 9,000 square feet typically devoted to furniture in each store is simply too small to generate healthy returns. So he'll shift those lines into a planned chain of 25,000-square-foot stores during the next five years.

He's also tackling the company's troubled automotive business. Last year, the division was hit by allegations that it sold customers unneeded repairs. The accusations drove customers away and cost the company $100 million in earnings. Martinez has discontinued most services, such as transmission repair, while concentrating on sales of tires, batteries, and shocks. The move allowed Sears to shed 11,000 repair personnel, for a saving of up to $110 million annually. And it focused the division on selling and servicing those parts that have almost always been money-makers. The result: Thanks to price cuts and better marketing efforts, tire sales jumped 19% in June and 15% more in July, while most of the industry was flat.

So is Sears finally on a roll? Bear Stearns & Co. analyst Steven Kernkraut predicts that the U. S. merchandise group will earn $232 million from continuing operations this year, up from $38 million in 1992. And he expects net income will jump an additional 36% in 1994, to $315 million. Martinez says numbers like that would start to fit his definition of a turnaround. So give him a year or two. Maybe by then, he'll be ready to join the ranks of the true believers in Sears' revival.

By Kevin Kelly in Chicago

THE KEYS TO SEARS' NEW STRATEGY

- Focusing on women customers and increasing apparel offerings
- Saving $300 million a year by closing money-losing catalog operations and stores, and cutting 34,000 part-time and 16,000 full-time staffers
- Recruiting outsiders to bring in new ideas, starting with merchandising group chief Arthur Martinez
- Spending $4 billion to renovate 500 of its stores
- Training sales staffers to improve service, long a sore spot for customers

DATA: BUSINESS WEEK

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Autos

CAR BUYING FOR THOSE WHO HATE TO HAGGLE

Roberta Cronin doesn't miss the way she used to shop for a car. In the old days, the Washington (D. C.) sociologist found herself matching wits with a pro, a salesman who raced back and forth to his manager's office, all the while feigning an inability to sweeten the deal further. "He'd say: 'No, no, we can't quite meet that price,'" says Cronin, "or: 'The only car we have has a sunroof.' We'd tell him we didn't want a sunroof, and he'd say: 'Ah yes, but for just $200....'"

Cronin's dickering days are history. In June, she bought a 1993 Honda Accord SE sedan for $18,664, roughly $3,800 below the sticker price and $250 under the dealer's factory invoice. The price was set before Cronin walked into the dealership. She had enlisted the help of CarBargains, a buying service run by Washington's nonprofit Center for the Study of Services.

QUOTE SHEETS. Fed up with high costs and wrangling, shoppers are turning to outfits that, for a fee, purport to arrange a good price on a set of wheels they want to buy or lease. These services are often marketed by banks, credit unions, warehouse discounters such as Sam's, or motor clubs such as the American Automobile Assn. While they often can get you a good break, savvy buyers willing to put in the time can probably do as well on price.

Each service takes a different route to uncover a deal. For a $135 fee, CarBargains tries to fetch better prices by having dealers bid against one another on the make, model, and style of car. But there's no guarantee that the dealer with the lowest bid has the precise car you want. Some buying outfits can deliver an exact vehicle, although customers pay higher fees. Despite low charges, automotive brokers may not get you much of a break at all. The brokers may be in cahoots with dealers, and some states, such as Texas and Washington, outlaw their services.

J. D. Power & Associates estimates that about 11% of last year's purchasers made contact with a buying service or broker, resulting in the sale of around 578,(vehicles. Nearly half the c tomers who found the exp ence more satisfying than traditional car-buying meth cited the absence of haggl as the chief reason. A th pointed to a lower or a g price. Even so, conventio dealers earned higher ma than did buying servic partly because some consu ers felt the services didn't fer a wide enough choice dealers or cars.

SALES TRICKS. CarBargains licits blind, competitive pr bids from at least five deal ships in your area. Wit two weeks, you receive packet containing qu sheets from each dealer an printout outlining the ma facturer's suggested ret price (MSRP) and dealer voice price for the base plus each factory-installed tion. On the quote sheets, dealers indicate whether th will sell at, above, or bel the invoice price. (In fact, invoice price rarely reflect dealer's actual cost. That's cause of factory-to-dealer centives and holdbacks, a c cealed profit—often 3%—k by the manufacturer until car is sold.)

You can compare bids tallying the markup or ma down, destination cha es, advertising-as ciation fees, a

er rebates or charges ed. The packet also of- s advice on financing service contracts, s a trade-in estimate your present car.

'he drawback is that get no guarantee the you want is on the Dealers can employ lew of sales tricks, e they've got you on ir turf. You should in- that the salesperson w you the actual fac- y-invoice document if or she suddenly pre- ts a sum different n what's shown on quote sheets.

Buyers won't ever e to visit a dealer 1 Consumers Automo- in Fairfax, Va. After sulting with you about car you want, down he color scheme and of options, Consumers omotive promises to ver the exact vehicle your doorstep. The pany charges $195 for s with a sticker price 15,000 or under, $295 vehicles with an MSRP ween $15,001 and $30,000, $395 for anything above . James Boerger, owner he service and author of *AAA Car Buyer's Hand-*, will inspect the paper- k to ensure you pay no e than the price quoted.

ther buying services base r fees on how soon you it the car. AutoAdvisor in ttle charges up to $679 to you a vehicle within a k. A factory order, which ically takes six to eight ks, costs $369 with a cred- ard, $319 if you pay cash. company claims it can n find discounts on "no- gle" cars, such as the Sat- . AutoAdvisor also says it refund its fee if you can the car you ordered for elsewhere.

While many car-buying out- deliver reliable service excellent prices, some ex- ts advise consumers to r clear of automotive bro- s. These are often small panies that charge as little $50 to $100 to find your supposedly at a handsome discount from a network of dealers they do business with. According to W. James Bragg, author of *In The Driver's Seat: The New Car Buyer's Negotiating Bible* (Random House, $12), the brokers might buy your car from a dealer in Timbuktu, raising questions as to how easily you can service it back home. And since brokers get a chunk of their income from the spread between what they pay for a car and the price they're charging, the deal may not be so outstanding.

VIDEO SKINNY. A wealth of pricing and other data is available for car buyers who prefer to do their own haggling. Consumer Reports Auto Price Service (303 745-1700) supplies printouts with the list price and dealer invoice for the car you have in mind. The sheets also recommend options you should buy: The report on the Ford Taurus GL advises buyers to take the antilock brakes and rear-window defroster. The first car report costs $11, two cost $20, and three go for $27. The AAA (800 932-0065) provides similar pricing reports at $11.95 for the first and $8 for each additional vehicle. Or you can phone AAA at $1.95 per minute: 900 776-4222.

Car summaries from Fighting Chance ($19.95, 800 288-1134) include buying tips from author James Bragg. A sample on the Infiniti Q45: "With the spread between the dealer invoice cost and the suggested retail as wide as it is on many of these vehicles, there is a lot of room for the dealer to be flexible and still make an honest buck." Pricing reports from AutoIntelligence ($12, 800 445-6111) contain crash-test results from the National Highway Traffic Safety Administration and road-test specs from *Car and Driver*. The two-volume *Auto-Intelligence New Car Decision Maker* ($12 each) discusses new models by size, type, and price. *The Car Book* by Jack Gillis (HarperPerennial, $11) includes chapters on showroom strategies and leasing vs. buying.

Members of AutoVantage ($49, 800 876-7787) are entitled to up to five free new-car summaries a year. Besides sticker and invoice prices, the reports offer three-year maintenance-and-repair-cost projections and stats on the collision and injury history of the vehicle you've chosen, compared with competing models. AutoVantage also runs a buying service. The company has some 2,000 dealers under contract; car prices are predetermined, usually at $100 to $200 above invoice cost.

Subscribers can download AutoVantage data by means of CompuServe, Prodigy, and other on-line services. CompuServe members can get dealer invoice prices and other specs from the "New Car/Truck Showroom." The cost to check out the goods on one car is 90¢; for $1.20 you can compare two vehicles side by side.

Buyers can also get the skinny by video. Former dealer Randall Wilkinson's *How To Win The Car-Buying Game: The Complete Video Toolkit* ($79.95, 800 644-3327) is packed with useful advice, ranging from how to interpret the fine print on the sticker to getting the best price on your trade-in. A workbook is included to help you compare financing terms and concoct your walkout price—the point at which you will go no higher. After all, if you leave the showroom before a deal is closed, the salesman might run after you with a price even a buying service would be proud of. *Edward Baig*

DRIVING DOWN CAR PRICES

BUSINESS WEEK asked six buying services to quote their best prices on 1993 models for a customer in Washington, D. C. The Taurus price includes the safety option group (passenger-side air bag, antilock brakes), plus a package with rear defroster, air-conditioning, etc. The RX-7 price includes the optional "touring package" (leather seats, sunroof, etc.). Many features are standard on the Q45 and Accord sedan.

	Ford Taurus GL	Infiniti Q45	Honda Accord SE	Mazda RX-7
Sticker price	$19,720	$46,850	$22,450	$36,775
Dealer invoice	16,982	37,970	18,914	31,226
AUTOMOBILE CONSUMER SERVICES Cincinnati 800 223-4882	16,362(a)	36,270(b)	18,964(c)	29,336(d)
AUTOADVISOR Seattle 800 326-1976	16,269(e)	36,339(e)	18,669(e)	29,244(e)
AUTOVANTAGE Houston 800 999-4227	16,317(f)	39,719(f,g)	19,463(f)	29,025(f)
CARBARGAINS Washington 800 475-7283	16,252(h)	36,605(h)	18,324(h)	29,361(h)
CONSUMERS AUTOMOTIVE Fairfax, Va. 703 631-5161	16,241(i)	36,365(j)	18,409(i)	29,265(i)
NATIONWIDE AUTO BROKERS Southfield, Mich. 313 559-6661	15,970(k)	NA	19,089(l)	32,283(m)

Footnotes: (a) Includes $275 fee; (b) Includes $600 fee which covers delivery; (c) Includes $200 fee; (d) Includes $500 fee which covers delivery; (e) Assumes credit card, factory order purchase fee of $369; (f) Includes $49 membership fee; (g); Assumes $300 delivery charge; (h) Includes $135 fee; reflects low dealer bid; (i) Includes $295 fee; (j) Includes $395 fee; (k) Includes $50 fee; (l) Includes $150 fee; (m) Includes $75 fee NA=Not available

DATA. CONSUMER REPORTS AUTO PRICE SERVICE, COMPANIES

SOME SERVICES PROMISE TO DELIVER THE CAR YOU WANT—DOWN TO THE EXACT COLOR SCHEME

Smart Money

MARGIN LOANS: A HARD LOOK AT THE MARKET'S 'EASY MONEY'

In a roaring bull market, shrewd investors keep buying stocks even if they have to borrow. So it's not surprising that in the past five years, as the Standard & Poor's 500-stock index has risen 76.3%, margin debt, created when investors borrow against the value of their stock, has grown 34.4%. Borrowing on margin is cheap, easy, and often tax-deductible. But don't get seduced by this quick source of cash: Today's Big Board bounty may not last much longer. "In an up market, with 50% margin, you can make twice as much," says Laurence Foster, a KPMG Peat Marwick planner. "But in down markets, you get what we technically call trouble."

The new federal tax package also takes some allure out of margin loans. You can still deduct the interest on loans used for investments against investment income such as dividends and interest. But if you use long-term capital gains to offset margin interest, you have to declare those gains as ordinary income, which is taxed at a higher rate for those in the upper brackets.

REBOUND REGRETS. One of the selling points of margin loans is their attractive rates. Most firms charge the "broker's call rate," usually around prime, depending on the loan size. T. Rowe Price Associates, for example, charges 7% for loans of less than $10,000 but only 5¼% for $50,000 or more. That compares with 12% to 18% for credit cards and 10% for auto loans. "Except for home-equity loans, it's hard to beat the rate you pay on margin," says David Harris, a Gruntal senior vice-president.

With margin loans, too, there's a simple approval process and a short waiting period. All you need is $2,000 to open an account. "We can have the money to you in 24 hours," says Walter Helmlinger, trading supervisor at T. Rowe Price. You can repay it on your own timetable. And the interest remains a last refuge for tax write-offs if you use the loan for business or investments.

So how do margin loans work? In effect, you borrow from your broker using securities as collateral. Say you're short on cash until a bond matures next month, and you want to snap up 100 shares of XYZ stock at its new low of $10. With a margin account, you can borrow up to 50% of the stock's cost (75% for corporate bonds and 90% for Treasuries). You and your broker each pay $500. If the stock jumps to $15 a share, the bundle grows to $1,500 and your equity is now worth $1,000—for a 100% return minus the interest.

The downside is that such dramatic returns can become dramatic losses if the stock drops. If it slides to $5, the stock is worth $500, but you still owe $500. You would lose your entire investment.

To ensure that investors don't get too far in the hole, brokers require them to meet a minimum balance. Typically, if your equity falls to 30% or less, you'll get a margin call requiring you to add enough money to meet the minimum. If you don't, the broker will make up the difference by selling your stock. You n have to take gains or los when it's not convenie Worse, if the market dives a short period, as it did the '87 crash, your bro could sell your stock at worst possible time—elimi ing any chance of profit from the rebound.

CAUTIOUS PLAYS. Since bull market could turn bea anytime, such a fate isn't fetched. For this reason, b rowing on margin is best to savvy investors, says Rowe Price's Helmling "Novice investors could get over their heads." Even s soned investors are wise be conservative with mar loans. "We recommend t clients borrow no more th 10% to 20%," says David I fenbach, vice-president of vestor lending services Prudential Securities. If y borrowed 20% on margin buy 100 shares of XYZ st at $10 a share, you would up $800, and your broker o $200. The XYZ shares wo have to fall about 74% bef you would get a margin ca compared with a drop of 3 for a 50% loan.

Stick with stable stoc such as utilities or blue chi says Chuck Humm, sen vice-president for market at Merrill Lynch. Before y borrow, compare the inter rates with your other sour of credit, says William Br nan, a partner at Ernst Young. Ask if you will ma more on the stock you b than you'll pay in intere Can you bail yourself out you need to?

Borrowing on margin m make sense if you want to versify without disrupti your portfolio or trade more onerous credit-c debt, or if you need sho term capital for your busine You may forgo any tax adv tage on your margin loan you borrow to buy perso items or if you own a lot municipal bonds—in which c the tax law reduces the lo interest you can deduct. A if the market dives, you co end up cracking open the n egg you've been coddling this time. *Pam Bl*

TO BORROW OR NOT TO BORROW

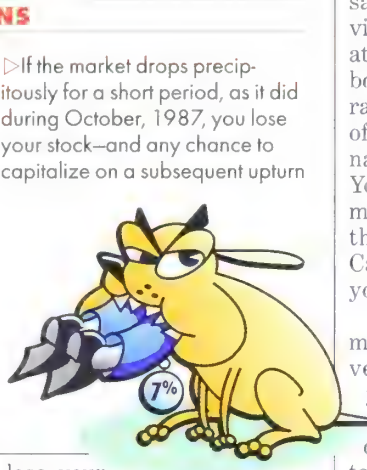
PROS

- ▷Next to home-equity loans, margin loans are the cheapest way to borrow
- ▷There's a simple approval process, and a very short waiting period
- ▷There is no repayment deadline unless the stock value drops significantly
- ▷If you double your stock purchase by buying on margin, you can double your gain
- ▷If you use the loan for investment purposes, you can usually write off the interest
- ▷You can use it to pay off more costly credit-card debt

CONS

- ▷If the market drops precipitously for a short period, as it did during October, 1987, you lose your stock—and any chance to capitalize on a subsequent upturn
- ▷If you use the money for personal items, such as a car or boat, you won't be able to deduct the interest
- ▷If the stock drops, your losses are magnified
- ▷If the stock falls below the margin call, you must pony up extra cash or sell shares to meet the call requirement
- ▷You may have to sell stock and take gains or losses to pay off the loan at an inopportune time

DATA: BUSINESS WEEK



Asia & The New China — Where The Growth Is

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September 20 through 22, 1993

The Portman Shangri-La
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Leisure

URBAN LORE, UP CLOSE AND ON FOOT

From the arch in Washington Square Park in 1916, bohemians declared the Independent Republic of Greenwich Village

In the two years that I've lived in New York City, I've taken great pains to look as if I belong here. My wardrobe is black, my hair is short and an unnatural color, my sunglasses cheap yet hip. But recently, I decided that in order to get to know my adopted city better, I should don the shorts, tennis shoes, and wide-eyed look of the tourist and take a walking tour.

New York begs to be walked. Because there is no dearth of history, architecture, or food, there is no dearth of walking tours. I opted for one that promised to combine all three: a "radical" walking tour of Greenwich Village, given by amateur historian and avowed anarchist Bruce Kayton (718 492-0069; $6). This was just one of a dozen listings for tours in the Big Apple, found in such magazines as *New York* and *The New Yorker*. A call to the New York City Convention & Visitor's Bureau (212 397-8222) yielded a number of other options, both straightforward and offbeat—such as David & Erik's Art Tours (212 226-6034), featuring two artists who trek you through the galleries and studios of SoHo. Why walk? Because "you can't get a personal, up-close, one-on-one experience with a city on a bus," says Kayton, who has been guiding tourists on foot since 1990.

BOMB FACTORY. Most cities and towns have some historic district or area of interest that is well worth strolling through. The local visitor's bureau can usually provide a list of walking tours. Once you've picked one, it's wise to call ahead for reservations. While you're on the phone, check conditions of the walk: How long will the tour last? Is it strenuous? (You may have to decide whether you're really ready for a three-hour tour up and down San Francisco's hills.) Wherever you walk, be sure to take along some water.

The Sunday of my walk through Greenwich Village was a perfect August day. A friend and I showed up at 2 p.m. in front of New York University Law School to meet Kayton, whose nine tours run the length of Manhattan, from Wall Street to Harlem. He spends several hours a week in the library looking for fodder for his tours, which run a few times each week from March through December. He packs his often hilarious stories with little-known details and supplements the information with period newspaper clippings and pamphlets.

We started out beneath Washington Square Park's arch, which bohemians scaled in 1916 to proclaim the Independent Republic of Greenwich Village. Our meand ings took us to the sites the 1911 Triangle Shirtwa Factory fire, which killed 1 female sweatshop worke and the 1970 bomb-factory plosion that killed four me bers of the radical Weath Underground.

MODEL TENANT. From th leafy block in the West V lage, we headed toward E 13th Street, walking sing file, like pilgrims, to the te ment where social reform Emma Goldman lived fr 1903 to 1912. Although the p lice wanted to evict her b cause of her political act ities, her landlord refuse She was one of the few te ants who paid her rent time, says Kayton.

Throughout the tour, Ka ton kept up a running d logue with the group. He w happy to learn a tidbit didn't know or debate so fine point of radical histo Several tour-takers had liv in New York during the 196 and '70s and added their o stories. Nearly three hou later, we were back at t park, a little richer in o knowledge of the city and great deal hungrier. Kayt recommended several go nosheries nearby, in his la official act as tour guide. A terward, with iced coffees hand, my friend and I ma our way back uptown, u abashedly walking and poi ing like a couple of out-o towners. *Julie Tilsn*

CITY WALKING TOURS

ATLANTA PRESERVATION CENTER 404 876-2040 "Walking Miss Daisy" tours through the stately Druid Hills section of Atlanta. Reservations. $5 adults, $4 seniors, and $3 students.

BIG ONION WALKING TOURS, NEW YORK 212 439-1090 The Brooklyn Bridge to Brooklyn Heights; eating tours of Chinatown, Little Italy, and other neighborhoods. Reservations. $9 adults, $7 students and seniors.

BOSTON BY FOOT 617 367-2345 Six 90-minute walking tours of historic districts in Beantown. Reservations. $6 for adults, $5 children.

CHICAGO ARCHITECTURE FOUNDATION 312 922-TOUR Tours of Frank Lloyd Wright houses in Oak Park, among other architecturally significant districts. Reservations. $9 adults.

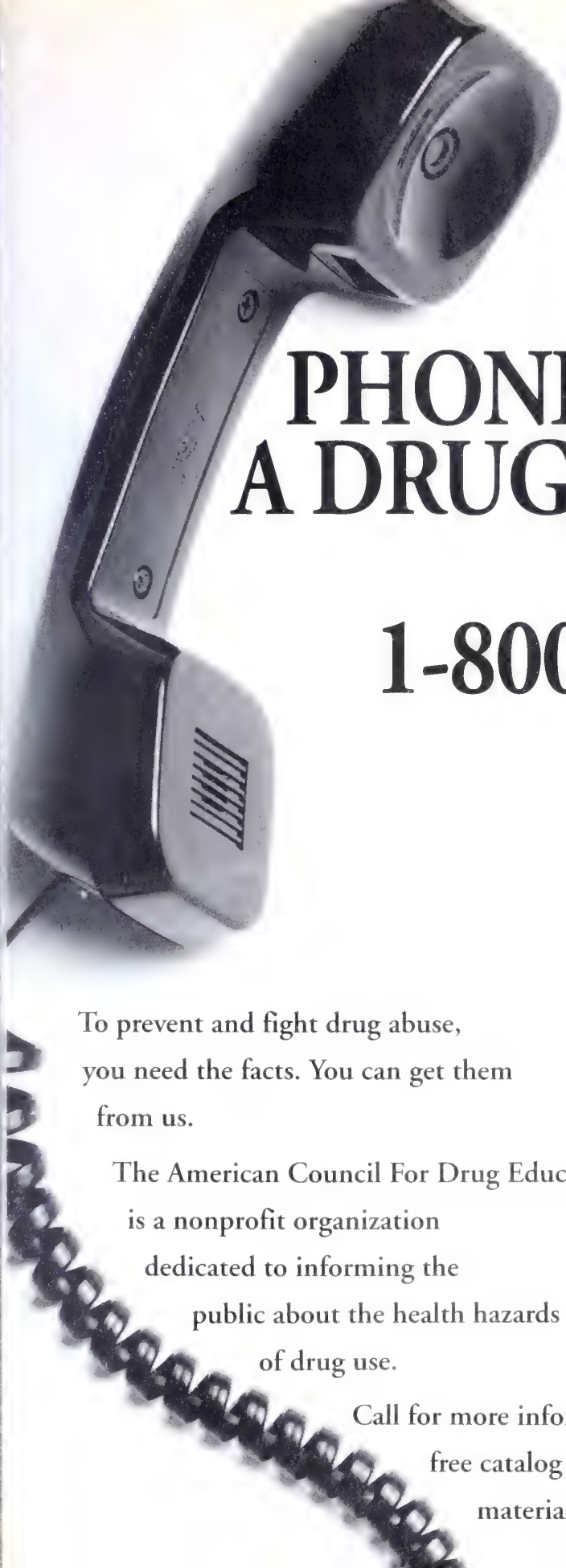
THE STROLLING NOSH OF SAN FRANCISCO 415 441-4221 Eat your way through Fisherman's Wharf. Reservations.

DATA BUSINESS WEEK

Worth Noting

■ **INVESTOR PERKS.** You may be eligible for discounts or freebies from companies you own stock in. Many corporations also offer dividend-reinvestment plans, which allow shareholders to buy additional stock without paying transaction fees. *Free Lunch on Wall Street* (McGraw-Hill, $14.95) tells which companies offer the best perks.

■ **MILLION MILES.** The frequent flier with the most "double dip" points earned by staying at a Hilton Hotel and flying American Airlines on the same trip between Aug. 16 and Nov. 15 will be awarded 1 million miles (a $25,000 value). All three-time double dippers get 1,500 bonus miles. Call 800 HILTONS.



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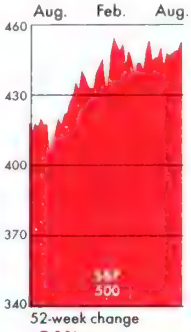
nvestment Figures of the Week

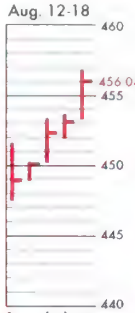
MENTARY

ıe ground rumbling from the eding bulls? It's hard to find ‹ market index that isn't mak- ıew high—the Dow Jones in- ıls, the S&P 500, the S&P p, and the Russell 2000. e getting a big boost from c bond rally that sent the ın the 30-year U.S. Treasury o 6.26%—the lowest since vernment began issuing the in 1977. Overseas, the ıs are booming, too, with the n stock portfolio up 3.22%. n and Toronto hit new highs.

STOCKS

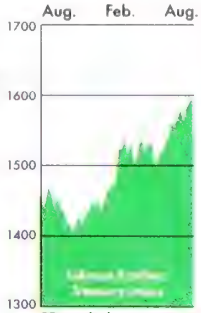


52-week change
+9.1%



1-week change
+1.2%

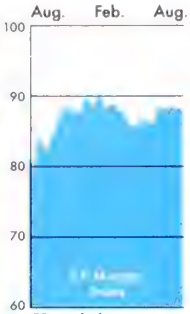
BONDS



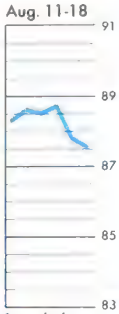
52-week change
+10.0%

1-week change
+0.5%

THE DOLLAR



52-week change
+7.7%



1-week change
–0.8%

RKET ANALYSIS

TOCKS	Latest	% change Week	% change 52-week
ONES INDUSTRIALS	3604.9	0.6	9.0
E COMPANIES (S&P MidCap Index)	172.4	1.6	19.6
COMPANIES (Russell 2000)	242.8	1.2	26.8
MPANIES (Russell 3000)	263.5	1.2	12.1

IGN STOCKS	Latest	% change (local currency) Week	% change (local currency) 52-week
N (FINANCIAL TIMES 100)	3073.6	2.2	30.0
(NIKKEI INDEX)	20,773.2	0.2	41.8
TO (TSE COMPOSITE)	4069.3	1.3	20.2

FUNDAMENTALS	Latest	Week ago	Year ago
90-DAY TREASURY BILL YIELD	3.04%	3.09%	3.15%
30-YEAR TREASURY BOND YIELD	6.26%	6.44%	7.32%
S&P 500 DIVIDEND YIELD	2.77%	2.79%	2.92%
S&P 500 PRICE/EARNINGS RATIO	23.5	22.8	24.5

TECHNICAL INDICATORS	Latest	Week ago	Reading
S&P 500 26-week moving average	446.7	446.3	Positive
Stocks above 26-week moving average	60.0%	58.4%	Neutral
Speculative sentiment: Put/call ratio	0.48	0.42	Positive
Insider sentiment: Vickers sell/buy ratio	2.11	2.13	Neutral

DUSTRY GROUPS

BRIDGE INFORMATION SYSTEMS INC.

-WEEK LEADERS	% change 4-week	% change 52-week	Strongest stock in group	% change 4-week	% change 52-week	Price
LICONDUCTORS	21.1	120.9	ADVANCED MICRO DEVICES	37.1	240.0	31 7/8
MEBUILDING	19.1	51.4	PULTE	29.4	49.7	36 7/8
NUFACTURED HOUSING	14.5	52.2	FLEETWOOD ENTERPRISES	16.8	58.8	22 5/8
ELS AND MOTELS	13.0	99.5	PROMUS	25.3	321.1	67 3/8
LINES	10.1	16.8	USAIR GROUP	12.6	31.4	16 3/4

-WEEK LAGGARDS	% change 4-week	% change 52-week	Weakest stock in group	% change 4-week	% change 52-week	Price
EL	–7.4	32.6	BETHLEHEM STEEL	–23.5	15.2	14 1/4
DES	–6.1	–18.5	STRIDE RITE	–11.1	–31.3	14
MMERCIAL SERVICES	–5.3	–9.7	OGDEN	–14.4	14.0	22 3/8
LUTION CONTROL	–5.1	–8.8	BROWNING-FERRIS INDUSTRIES	–14.9	4.0	22 7/8
DICAL PRODUCTS AND SUPPLIES	–4.1	–25.5	C.R. BARD	–9.5	–24.1	22 1/2

TUAL FUNDS

MORNINGSTAR INC

ERS eek total return	%
RRILL LYNCH TECHNOLOGY A	12.1
W INTERNATIONAL	11.5
W GLOBAL	11.1

k total return	%
JAPANESE SMALL COMPANY	96.5
IG GROWTH	80.5
STONE NIKKO JAPAN	77.8

LAGGARDS Four-week total return	%
LEXINGTON STRATEGIC INVESTMENTS	–22.2
UNITED SERVICES GOLD SHARES	–13.6
BULL & BEAR GOLD INVESTORS	–11.8

52-week total return	%
INVESCO STRATEGIC HEALTH SCIENCES	–18.1
FIDELITY SELECT HEALTH CARE	–17.1
FIDELITY SELECT MEDICAL DELIVERY	–15.1

LATIVE PORTFOLIOS

DRI/McGRAW-HILL

amounts sent the present of $10,000 ed one year ago h portfolio

ntages indicate ay total returns

Foreign stocks
$13,792
+3.22%

Treasury bonds
$12,147
+0.46%

U.S. stocks
$11,062
+0.82%

Gold
$10,970
–2.30%

Money market fund
$10,229
+0.05%

on this page are as of market close Wednesday, Aug. 18, 1993, unless otherwise indicated groups include S&P 500 companies only; performance and share prices are as of market close Aug. 17. Mutual fund returns are as of Aug. 13. Relative portfolios are valued as of Aug. 17. A more detailed explanation of this page is available on request.

A LEVEL FIELD FOR TELECOM'S TITANS

The $12.6 billion deal to buy McCaw Cellular Communications Inc. by American Telephone & Telegraph Co. heralds the redrawing of the telecom map for the first time since 1984, when Judge Harold H. Greene presided over the breakup of AT&T. Advancing technology is quickly creating the building blocks for an "anywhere, anytime, anyone" communications system that may truly make us all neighbors in a global village.

But the execution is proving to be difficult. By merging with McCaw, AT&T now can begin to use cellular to reach out once again and touch millions of customers directly in the local phone markets (page 26). That prospect has the seven regional Baby Bells up in arms. Under the terms of the divestiture, they are prohibited from offering the kind of long-distance service dominated by AT&T. If AT&T is going to be able to pick off their customers, especially their best business clients, through wireless links, the Bells want reciprocity. They want "in" on long distance, and they are making sure that Washington hears their complaint.

Competition is always good. But what's fair is fair—for the Bells as well as AT&T. While AT&T is a $65 billion giant that commands about 60% of the long-distance telephone market, it is equally true that the Bells are a seven-headed monopoly with combined revenues of $100 billion and control of over 95% of the local market. Not only do the Bells have a legal lock on most of the long-distance calls passing through their territories but also 99% of all cellular phone calls currently go through them. There's not much competition in the local marke

What's needed is a wholesale rethinking of telecom reg lation. While the division of power between AT&T and the Ba Bells may have made sense a decade ago, technological chan is quickly making the 1984 decision obsolete.

AT&T and the Baby Bells are already signaling that th might be willing to compromise in return for a chance to o erate in each others' markets. In exchange for AT&T perm ting the Bells into both the long-distance market and telec equipment manufacturing, some of the Bells may be willi to relinquish their near-monopoly over local markets.

Now it's time for regulators to get out of the way of gre er telecom competition. Regulation of the industry is curren divided among the Justice Dept., the Federal Communic tions Commission, and 50 states. Each has its own agenc Judge Greene appears unwilling to do anything that mig unravel his original divestiture decision. Only specific cou actions over the years have moved him to allow changes. T FCC is pulling in the other direction, trying to liberalize t telecom markets. The states are preoccupied with guara teeing basic telephone service to the public.

It is up to Congress to step forward with new legislati to encourage the Baby Bells and AT&T to move together t ward more open markets. The more competition the Bells low in their local telephone markets, the greater participati they should have in long distance. The same principle hol for AT&T. Competition, not regulation, is the telecom solutio

DON'T PLAY GAMES WITH THE DOLLAR

A decade ago, it cost the Japanese 230 yen to buy one U. S. dollar. Today, it only takes about a hundred. That comes out to a penny a yen. Never before have the two currencies reached parity.

This erosion in the value of the dollar appears to sit well in Washington. In fact, foreign-exchange traders have concluded that, despite official denials, the Clinton Administration is using the currency markets to redress America's $50 billion trade deficit with Japan.

And why not? Detroit is picking up domestic market share as Japanese auto makers raise their prices to compensate for the higher yen. U. S. manufacturers of turbines are making lower bids against Japanese competitors in Latin America, thanks to the cheaper dollar.

Yet debasing one's currency to gain trade advantages can be a dangerous game. This is especially true when there are few domestic alternatives to imports: Allowing prices to go up can fuel inflationary fires. Today, there just aren't a lot of made-in-America competitors for many Japanese products. Even when there are, as in autos and chips, local producers tend to raise prices under the umbrella of higher-priced Japanese goods.

Paradoxically, the cheap dollar may even hurt U. S. trade with Japan. One of the best ways to boost exports is to fir invest abroad. With the yen up 20% against the dollar th year alone, opening offices and manufacturing goods in J pan becomes that much more expensive.

Trying to play the foreign-exchange markets can also bac fire on domestic monetary policy. About $1 trillion of cu rencies are traded every day. No central bank can stand u to that kind of pressure, as the French only just discovere If the dollar's gradual decline slides out of control, the on option for the Federal Reserve would be to raise rates, hur ing the nation's already weak economy.

Exchange rates make poor policy tools. If Washingto wants to cut the trade deficit, it should do two things. Firs it should concentrate on getting Japan to open up its ma kets. For example, U. S. brokerages are being cut out of th underwriting market in Tokyo even though they are able t compete favorably with Japanese firms (page 66). Secon Washington should encourage the new government of Prim Minister Morihiro Hosokawa to accelerate consumer spen ing through lower interest rates and a cut in income taxe Greater access to a prosperous Japanese market, not just cheaper dollar, is the key to reducing America's trade def cit with Japan.

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What With Drought, Grasshoppers And The Cost Of Lumber, Social Security Is The Least Of Their Worries.

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